

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

ices Technical Information Agency

ed supply, you are requested to return this copy WHEN IT HAS SERVED
that it may be made available to other requesters. Your cooperation

43237

ERNMENT OR OTHER DRAWINGS, SPECIFICATIONS OR OTHER DATA
PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED
REMENT OPERATIONS, THE U. S. GOVERNMENT THEREBY INCURS
FOR ANY OBLIGATION IN WHATSOEVER; AND THE FACT THAT THE
VE FORMERLY RELATED, FURNISHED, OR IN ANY WAY SUPPLIED THE
ICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY
WISE AS IN ANY MANNER IMPLYING THE HOLDER OR ANY OTHER
TION, OR CONVEYING ANY RIGHTS OF PERMISSION TO MANUFACTURE,
PENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

Reproduced by
DOCUMENT SERVICE CENTER
NOTT BUILDING, DAYTON, 2, OHIO

CLASSIFIED

AD No. 43237

ASTIA FILE COPY

UNIVERSITY OF MINNESOTA
DEPARTMENT OF PSYCHOLOGY

The Complete Minnesota Norms for
Responses to the Words from the
Kent-Banoff Word Association Test

by

WALLACE A. RUSSELL

and

JAMES J. JENKINS

Studies on the Role of Language in Behavior
Technical Report No. 11
August, 1954

Under Contract with the Office of Naval Research
Contract Number N8 onr-66216

BEST AVAILABLE COPY

THE ROLE OF LANGUAGE IN BEHAVIOR

Technical Report Number 11

THE COMPLETE MINNESOTA NORMS FOR RESPONSES TO STIMULUS WORDS FROM THE KENT-ROSANOFF WORD ASSOCIATION TEST

by Russell and James J. Jenkins
University of Minnesota

While investigating the role of associative and contextual factors in verbal behavior, the writers have had to make frequent recourse to the normative data for the Kent-Rosanoff test gathered by Schaeffer more than twenty years ago. After those norms had been used in several experimental studies, it became apparent from internal evidence that the data were no longer applicable to subjects being investigated today. In consequence, the project of gathering new norms was undertaken during the fall and winter of 1952-53. The results obtained make up the body of this technical report. These norms have already proven to be a valuable research aid to the writers and are being reproduced in their entirety in order that they may be made more widely available for future research.

One hundred stimulus words from the Kent-Rosanoff Word Association Test were administered to students in beginning psychology classes at the University of Minnesota. The form of the test list is presented in Appendix A. The two mimeographed sheets making up the test were stapled together and distributed to the students during regular class periods with only the blank sides immediately observable. The instructions were as follows:

"THIS IS ONE OF THE STUDIES IN VERBAL BEHAVIOR BEING DONE AT MINNESOTA.
THIS PARTICULAR EXPERIMENT IS ON FREE ASSOCIATION."

"PLEASE WRITE YOUR NAME ON THE OUTSIDE OF THE PAPER PASSED TO YOU. YOU
CAN IGNORE THE PLACE FOR YOUR NAME ON THE OTHER SIDE."

"WHEN YOU OPEN THESE SHEETS, YOU WILL SEE A LIST OF 100 STIMULUS WORDS.
AFTER EACH WORD WRITE THE FIRST WORD THAT IT MAKES YOU THINK OF. START
WITH THE FIRST WORD; LOOK AT IT; WRITE THE WORD IT MAKES YOU THINK OF;
THEN GO ON TO THE NEXT WORD."

"USE ONLY A SINGLE WORD FOR EACH RESPONSE."

"DO NOT SKIP ANY WORDS."

"WORK RAPIDLY UNTIL YOU HAVE FINISHED ALL 100 WORDS."

"WHEN YOU ARE THROUGH TURN YOUR PAPER OVER AND WRITE ON THE BACK THE LETTER THAT APPEARS ON THE BOARD AT THAT TIME."

"ARE THERE ANY QUESTIONS?"

"READY. GO."

After four minutes, the letter A was printed on the blackboard. Every thirty seconds thereafter a new letter was substituted in alphabetical sequence. A rough index of the time necessary for each student to complete the test could be obtained by reference to the letter appearing on the back of his test form.

The test was given to 113 subjects in all. Of these 23 failed to complete their forms and were subsequently discarded. This left 1008 subjects for final tabulation of responses.

On the following pages, the responses given to each stimulus word are listed. The number preceding each response word indicates the number of different students who gave that particular response.

This study is part of a larger series of studies of verbal behavior being conducted at the University of Minnesota. This series is being sponsored by the Office of Naval Research (Contract Number N00011-66-216) under its policy of encouraging basic research.

STIMULUS - 1. Table

840	chair	3	dinner, tennis, Mable
41	food	2	door, cup, room, fork, round, floor, silver
21	desk	1	four, spoon, lamp, bed, card, board, hard,
15	top		huge, plate, pool, book, maple, house, sink,
11	leg(s)		stable, sable, mesa, drink, leaf, set, black,
9	eat		tablecloth, black, kitchen, meat, flat, study,
8	cloth		company
7	dish(es)		
6	wood		

STIMULUS - 2. Dark

829	light	2	alley, love, house, dark, movie, girl,
55	night	1	red, moon, noon, stanky, Katy, photography,
33	room		owl, coat, cold, picture, window, color,
31	black		camera, negro, sleep, brown, mood, photo.
9	white		wood, lonely, music, murder, women, obscure,
5	closet		bark, tight, noise
4	bright		
3	ink		

STIMULUS - 3. Music

183	song(s)	5	dancing, beauty, choir, hall, nice, sheet,
168	note(s)		laughter, concert, words
124	sound	4	voice, drum, trumpet, opera, tune, chord, stand,
51	piano	3	key(s), beautiful, music, record, scale, clef,
28	sing		trombone, maestro, rhythm, singing, composer,
26	noise		hear, time, listen
23	band	2	pleasant, violin, box, pretty, pleasure, staff,
16	horn		aria, clarinet, theory, Chopin, poetry, popular,
15	art		room, singer, chair, good, flute
14	sweet, soft,	1	emotion, beat, joy, me, fond, death, color,
	instrument		phonograph, lessons, classical, fun, camera,
13	symphony		fast, peace, 4 Aces, Sebastian, ballet, lyrics,
12	play		pianissimo, page, Bartok, harmonica, light,
11	tone, jazz		fine, wind, cornet, appreciation, chorus, class,
10	orchestra		enjoyment, literature, musician, rhapsody, bow,
9	dance		deaf, discord, sax, tuba, charm, conductor,
8	Beethoven, Bach		blue, Barbie, Jan, mother, soothing, Grieg,
7	bar(s), radio		happiness, rat, Dick, chimes, jangle, Stravinsky,
6	score, harmony,		Wayne, therapy, dissonance, ear, ingenue, rice,
	melody		old time, sinister, accordion, daughter, cold,
			organ, baton, Brahms, string, silence, choral,
			chamber, quiet, A, composition

STIMULUS - 4. Sickness

376 health
159 ill
153 death
64 bed
58 well
26 illness
21 doctor
13 hospital
12 disease
7 bad
6 flu, dead, cold
5 sea, healthy, sick
4 pain, man
3 medicine, me

2 nausea, pills, cancer, measles, fever, hurt, vomit, weak, stomach, room
1 Sister Kenny, wellmess, ugh, mother, sad, tests discomfort, unhappy, darkness, gah, heart trouble, pale, ship, aches, dislike, famine, misery, recovery, ish, dying, die, no, ear, goodness, heal, throat, sour, weakness, boat, pleuresy, headache, beer, grandmother, dad, live, mom, nurse, sheets, T.B., you, grief, tooth, dog, sore, uncomfortable

STIMULUS - 5. Man

767 woman(en)
65 boy
31 girl
18 dog
17 lady
10 mouse
5 male, men, animal
4 father, strong

3 friend, tall, pants, human, wife
2 suit, beard, sex, sports, person, child leg(s), me
1 Joe, hand, muscle, older, Bruce, panes, god, boxer, farm, being, earth, bad, big, beast, hair, hat, fellow, Pat, lift, Roger, superman, Ed, Roosevelt, made, shirt, lean, date, moon, anthropology, figure, dark, handsome, Rodney, strength, home, build, money, race, tough, normal, hit, body, cow, large, sheep, poor

STIMULUS - 6. Deep

318 shallow
131 dark
101 water
76 sea
52 high
48 ocean
38 soft
24 hole
23 low
19 well
17 sleep
13 blue
12 down
11 pit
9 river, purple
8 wide, narrow
7 far
5 light, black

4 long, lake, voice, South
3 steep, complex, depth, hollow
2 cave, mine, snow, night
1 little, ground, bed, open, fathom, under, wave, dirty, afraid, height, cushion, music, deeper, trouble, drop, cavern, gold, tide, roots, very, Tom, base, falling, slumber, bottom, song, clear, thick, red, chair, slow, crevace, seat, pool, loft, see, raft, valley

STIMULUS - 7. Soft

87	hard	3	wool, hair, tender, sofa, girl, furry, water, sweet, deep, rug
81	light	2	mattress, high, mellow, rough, head, pretty, shoe, satin, mushy, cuddly, snow, quiet, cloud, tissue, down, sweater, spongy
42	pillow	1	sleep, heart, white, smooth, butter, fussy, comfort, harsh, feel, soothing, felt, airy, dim, fluff, spot, Ivory Snow, body, material, couch, quilt, weak, doll, paper, breath, fish, feathery, lee, rough, fat, sponge, custard, sheet, cloth, flesh, cool, hollow, seat, sound, tooth, sink, long, blanket, near, cold, soap, cat, cloy, egg, pink, pad, blue, woman, candy
28	bed		
22	smooth		
18	loud		
16	cotton, music		
13	fur		
12	touch		
11	fluffy, chair		
10	feather(s)		
9	warm, drink		
8	velvet, heavy		
7	cushion		
6	silk		
5	easy, dark, downy		
4	kitten		
	nice, skin		

STIMULUS - 8. Eating

369	food	4	candy, spoon
138	drinking	3	meal(s), fast, eat, bite, digesting
122	sleeping	2	taste, writing, chew, gorging, fun, carrot(s), dishes, place, bread, smoking, burp, starve, supper
45	hungry	1	breathing, grapes, turkey, soup, noon, consuming, much, giants, cheese, heartily, resting, eaten, people, sitting, happy, swallowing, ate, pig, plate, ham, life, man, malt, inn, gulping, not, teeth, hand, dessert, satisfy, potato, egg, lettuce, brook, head, banana, hearty, vomit, dining, swallow, dieting, gourmand, in, restaurant, chicken, mouthful, looking, fish, horse, fill, living, appetite, lion, masticating, through, enjoy, Le Roy, ice cream
22	starving, full		
16	fat		
12	steak, good		
11	hunger, mouth		
10	table, drink		
9	chewing, dinner, sleep		
8	fork		
7	lunch, fasting		
6	apole, habit(s)		
5	meat, biting, stomach, sick		

STIMULUS - 9. Mountain

266	hill(s)	11	rock(s)
127	high	10	lake
65	snow	9	big, climber, range, tree(s)
64	valley	8	height
46	climb	7	river, steep, horse
43	top	6	ski, Rocky(ies), Everest
24	peak(s), molehill	5	plateau, lion
22	man, climbing	4	Yellowstone, west, Alps, Colorado
20	plain	3	large, Glacier, sky, road, magic, cliff, air, green, cave, trip
18	goat		
13	stream		

STIMULUS - 9. Mountain (continued)

- 2 water, sheep, crag(s), cloud(s), prairie, stone, crevice, blue, fall, point, home, land, mole, Kilimanjaro, Denver, tall, scenery, mound
1 Montana, Moses, ground, Himalayas, huge, squirrel, picture, table, moon, snow-capped, house, faith, base, Idaho, Mt. Ranier, Pike's Peak, barrier, hole, knoll, mule, path, grass, berge, glory, heap, large hill, dirt, foot, incline, canyon, hunt, Jungfrau, Seattle, rain, chain, king, white, women, Grand Teton, bluff, village, scene, cold, flat, face, shallow, slope, desert, Penna, jump, ice, grown, Tehans, thru air, basement, whip-poor-will

STIMULUS - 10. House

- | | | | |
|-----|------------------------------|---|---|
| 247 | home | 7 | lawn, light |
| 93 | door | 6 | cottage, boat, dog, man, black, hut |
| 47 | garage | 5 | farm, furniture, cabin, street |
| 40 | barn | 4 | porch, paint, garden, table, comfort |
| 33 | roof, white | 3 | children, life, hotel, mother, lot, dwelling, square, tree |
| 23 | yard, windows | 2 | my, key, living, small, shed, kitchen, clean, apartment, hold, tent, wife, coat, mansion, fence, rent, work, gable, bed, road, sleep, green, grass, warmth, castle |
| 20 | wood | 1 | park, ranch, tall, den, heaven, shelter, fly, doctor, shade, sidewalk, louse, alley, manor, horse, blue, prostitution, cleaner, cat, still, shutter, abode, well, now, out, maid, money, habitat, haven, birch, cozy, breaker, jack, moving, pink, color, rest, construction, hell, payments, antenna, pillars, furnace, burned, cord, detective, representative, trailer, stone, Comstock, baker, yellow, party, bungalow, block, tiling, wide, women, lake, hamburgers, blinding, worn, Don, swift, land, horse, back, large, haunted |
| 19 | room | | |
| 17 | car | | |
| 16 | live | | |
| 15 | brick | | |
| 14 | chair(s), mouse | | |
| 13 | big, family, building, shack | | |
| 12 | top | | |
| 11 | people | | |
| 10 | red, chimney | | |
| 9 | build, dark | | |
| 8 | warm | | |

STIMULUS - 11. Black

- | | | | |
|-----|--------------------------------|---|--|
| 751 | white | 6 | horse, board, coat, wool, button, cold, brown, dress, gray, blackboard |
| 54 | dark | 1 | dirt, cap, dismal, green, casket, big, shiny, nice, pitch, Sam, dirty, death, hole, velvet, suit, spade, cat, stove, blackboard, ebony, chair, singe, magic, eye, dead, pants, witch, jack, telephone, murder, afraid, ink, book, stocking, darkness, cave, kitten, midnight, rake, wagon, depth, satin, good, marble, moon, whittle, hair, Negro, whiten, pit, body, blouse |
| 26 | cat | | |
| 22 | light | | |
| 20 | night | | |
| 11 | sheep | | |
| 10 | color | | |
| 9 | red | | |
| 6 | blue, dog | | |
| 5 | cloth | | |
| 3 | coal, bottom, paper, car, shoe | | |

STIMULUS - 12. Mutton

365	lamb	5	stew, coat
295	sheep	4	steak, fur, pork, dog
96	meat	3	wool, animal, cotton
56	chops	2	sieve, goat, bread, rabbit, ham, ish, deer
32	beef	1	dislike, ugh, button, role, hook, bone, scrap,
25	food		shoulder, lousy, baseball, cat, hole, glove,
12	veal		calf, good, biscuit, fleecy, cold, song, steam,
10	collar		crown, cake, ghetto, white, scarf, grease, soup,
9	leg		G.I. stew, sutton, suffolk, horse, cloth, bake,
7	Jeff		Christmas, sit, breakfast
6	eat, fat		

STIMULUS - 13. Comfort

117	chair	7	house, luxury, couch, sickness, good
99	bed	6	sick, sofa, southern
76	ease	5	uneasy, easy chair, sorrow, pleasure, enjoyment
71	home	4	console, davenport, peace, happiness, Tom, cozy,
69	soft		mother
55	discomfort	3	joy, girl(s), illness, money, fire, soothe,
40	sleep		hardness, misery, hurt, content, safe
23	rest	2	ill, relaxation, food, cold, station, car, aid,
21	health		satisfaction, uncomfort, leisure, sad, solid,
20	warm		fireplace, yes, love, comforter, wife, quiet,
19	hardship, hard		comfortable
18	easy	1	heaven, living, despair, soften, tired, wealth,
15	warmth		whiskey, night, fine, security, relaxed, lounge,
13	uncomfortable		swing, fatigue, distress, foot, sit, sleeping,
12	lazy		sadness, you, unease, sitting, snuggle, weary,
11	nice		work, care, heart, women, unrest, convenient,
10	pillow, blanket,		bath, me, restful, convenience, wine, armchair,
	relax		harsh, clean, kind, fort, Peter, bliss, book,
?	pain		dreary, television, friends, child, age, well,
8	happy, help		bell, laziness, music, people, person, baby, boat,
			suffering, round, feeling, full, yum, Bill, cove,
			cushion, friendly, heat, grief, hot, pity, cart,
			crap, smell, monk, rocks, quilt, ye, sea, don't

STIMULUS - 14. Hand

255	foot(ee)	12	nail
237	finger(s)	10	leg
131	arm	8	hold
53	glove	7	wrist
38	shake	6	hard, heart, palm, touch, ball
36	ring	5	skin, white, food, write, lotion
27	mouth	4	body, head
23	soft	3	shoe, cold, grasp, woman, short
15	face		

STIMULUS - 14. Hand (continued)

- 2 work, eye, strong, right, book, smooth, man, toe, chapped
 1 hand, revealing, wet, Lois, maiden, make, money, girl, teeth, long, paw, mark, feel, cuff, hurt, dexterity, piano, job, mitten, chin, appearance, warm, thumb, writing, big, callous, fist, limb, shaking, made, left, down, action, find, human, heel, art, bed, give, large, stool, watch, form, Bill, cream, nice, dirt, house, some, ink, towel, back, digit, welcome, reach, table, me, handcream, friend, fingernail

STIMULUS - 15. Short

- | | | | |
|-----|---------------|---|---|
| 397 | tall | 3 | little, stop, high, wide |
| 336 | long | 2 | line, dwarf, snort, tail, good, story, wave, |
| 76 | fat | | day, cake, stature, time, low, pencil, quick, |
| 21 | small | | person, length |
| 18 | man | 1 | gun, tiny, digit, brief, box, baby, general, |
| 11 | hair | | child, black, square, trousers, basketball, lady, |
| 9 | dark, stout | | blonde, sweet, fingers, cut, lion, inch, me, |
| 7 | girl | | midget, shorter, plump, beer, less, heavy, loud, |
| 6 | pants, stocky | | nose, stuff, stick, side, lived, ruler, dog, |
| 5 | hand, light | | name, curt, skinny, step, distance, ness, funny, |
| 4 | shirt, stubby | | bold, limited, thick, Carol, height, Filipino |

STIMULUS - 16. Fruit

- | | | | |
|-----|--------------|---|---|
| 378 | apple | 8 | sweet |
| 114 | vegetable | 6 | candy, good |
| 94 | orange | 5 | peach, grapefruit, grapes, flower, seed, bowl |
| 62 | fly | 4 | nut |
| 46 | berry | 3 | basket, queer, strawberry, stand, fairy |
| 43 | sat | 2 | bitter, taste, citrus, cup, summer, jello, lemon, |
| 31 | pear | | eating, boot, yellow |
| 27 | banana | 1 | squishy, blossom, monkey, roast, strange, boy, |
| 23 | cake | | tangerine, meat, route, cocktail, slurp, weed, |
| 15 | food, cherry | | vine, healthful, walnut, Harry, Ralph, pickle, |
| 14 | juice | | smell, animal, beverage, child, tail, pleasant, |
| 13 | tree | | sour, healthy, dark, tomato, raspberry, house, |
| 11 | salad | | ripe |

STIMULUS - 17. Butterfly

- | | | | |
|-----|-----------|----|-----------------------------------|
| 144 | moth | 23 | cocoon |
| 117 | insect | 22 | summer |
| 104 | wing(s) | 21 | color(s) |
| 84 | bird | 20 | monarch, bee(s) |
| 78 | fly | 14 | stomach |
| 62 | yellow | 9 | worm, beauty |
| 42 | net | 7 | flying |
| 34 | pretty | 6 | animal, beautiful |
| 33 | flower(s) | 5 | blue |
| 27 | bug | 4 | flight, caterpillar, Madam, opera |

STIMULUS - 17. Butterfly (continued)

- | | |
|---|---|
| 3 | ant, spring, butter, catch, dance, flutter |
| 2 | light, wasp, jet plane, sky, soft, mouse, colorful, song, dragonfly, Lepidoptera, dog, orange, spots, warm, lagoon, sunshine |
| 1 | roach, tree, feather, delicate, thing, grace, car, canary, butterfly's, fragile, flap, swim, curtain, maggot, girl, air, morn, hobby, smooth, felt, hornet, dainty, robin, grass, mosquito, buttercup, silk, Orthoptera, wheat, game, collection, field, louse, tiger, California, blind, cow, chase, watch, Geopelia, outside, woods, dist, Spanish fly, freedom, nothing, nature, flea, sun, zoology, garden, Japan, look, dandelion, crazy |

STIMULUS - 18. Smooth

- | | | | |
|-----|--|---|---|
| 328 | rough | 3 | bumpy, clear, wood, clean, round, rugged, |
| 206 | soft | | |
| 135 | hard | 2 | metal, top, sand, marble, stone, ice cream, mallow, road, sailing, plane, felt, nice, slippery, light, floor, feel, |
| 40 | silk | | |
| 29 | hands | 1 | bumpy, grass, face, aluminum, dark, long, chalk, finish, ride, steel, scratchy, drink, irregular, pillow, music, cylinder, stout, muscle, black-board, pavement, whiskey, rigid, simple, gloss, frictionless, cool, sheet, rocky, wrinkled, satiny, slide, glossy, bore, fine, neat, lines, skater, narrow, water, uneven, ocean, warm, swelter, person, sandy, flowing, woman, desk, brittle, porcelain, white, board, easy, rainy, frosting, exciting, shave, ivory, good, cut, board, sea, man, iron, touch, taste, block, share, oil, jerky, mohogany |
| 13 | skin | | |
| 13 | glass | | |
| 12 | ice | | |
| 11 | surface, velvet | | |
| 10 | even | | |
| 8 | flat | | |
| 7 | sharp, table, shiny, level | | |
| 6 | sandpaper, satin | | |
| 4 | coarse, creamy, cloth, slick, marsh, silky | | |

STIMULUS - 19. Command

- | | | | |
|-----|----------------------|---|---|
| 196 | order | 6 | bark, word, decision, march, ROTC, give |
| 102 | army | 5 | man, leader, military |
| 78 | obey | 4 | force, answer, loud, discipline, action, lead |
| 65 | officer | 3 | law, respond, response, sir, hard, request, dog, speak, captain, act |
| 33 | performance | 2 | yes, Spanish, task, wish, service, power, call, execution, hear, chief, car, post, strong, rule(s), signal, respect, control, teacher, fellow, jump, colonel, mean |
| 27 | do, tell | | |
| 26 | shout, general | 1 | hat, polite, plea, book, salute, fulfill, Hitler, obedience, war, whistle, stern, noller, start, demanding, noise, attack, make, instruction, lecture, lead, anarchy, major, overseer, sit, report, regiment, disregard, boss, direction, don't, choose, erect, tough, hike, crisp, pass, displeasure, repeat, commander, beg, forward, retrieve, agreement, drill, charm, lord, shant, me, stupid, play, headqtrs, sternness, marine, change, sword, direct, Lacey, planes, heard, disobey, Caesar, situation, head, firm, no, |
| 23 | halt | | |
| 20 | voice | | |
| 18 | soldier | | |
| 16 | harsh | | |
| 15 | attention | | |
| 13 | sharp | | |
| 12 | stop | | |
| 11 | navy | | |
| 10 | go | | |
| 9 | demand, yell | | |
| 8 | sergeant, ask | | |
| 7 | air force, air, talk | | |

STIMULUS - 19. Command (continued)

- 1 perform, gun, Pfc., deep, high, Ike, Lt., help, reprimand, dominating, take, execute, relax, pilot, father, correct, wave, hell, learn, bellow, duty

STIMULUS - 20. Chair

- | | | | |
|-----|-----------------------------|---|--|
| 498 | table | 4 | floor, brown, house, couch, pillow |
| 205 | sit | 3 | back, relax, cloth, window |
| 45 | leg(s) | 2 | easy, man, davenport, bench, sleep, room, rung, car, electric, woman, lamp, rocker, home, blue, swivel, top |
| 38 | seat | 1 | president, living room, study, execution, glue, me, rug, leather, magazine, modern, bottom, fall, hat, piano, upholstery, embroidered, armchair, height, wicker, foot, cozy, green, black, office, lazy, overstuffed, cover, round, red, straight, paint, small, wheel |
| 26 | soft | | |
| 19 | desk | | |
| 15 | arm | | |
| 12 | sofa | | |
| 9 | wood | | |
| 8 | rest, cushion | | |
| 7 | stool | | |
| 6 | hard | | |
| 5 | comfort, high, sitting, bed | | |

STIMULUS - 21. Sweet

- | | | | |
|-----|--------------|---|--|
| 434 | sour | 5 | chocolate |
| 162 | candy | 1 | Sue |
| 80 | sugar | 3 | lovely, pickle, heart, sound |
| 76 | bitter | 2 | milk, talk, harsh, cream, eat, woman, cake, lemon, pie, sick, cute, smile, strong, loud, love, hard, pretty, gentle, mellow, light |
| 33 | music | 1 | sacharine, innocent, notes, safe, sticky, joy, potato, sentimental, sharp, good looking, tangy, lips, food, little, LaVonne, young, thing, simple, song, breath, smooth, nut, sweeter, me, Dixie, melody, dark, nausea, nothings, scent, tart, grass, sing, acid, dream, thick, bird, Virginia, sweetheart, Barb, delicious, tender, whistle, cookie, spice, wife, sixteen |
| 22 | soft | | |
| 17 | girl | | |
| 15 | good | | |
| 13 | tooth, taste | | |
| 11 | nice | | |
| 8 | low | | |
| 7 | honey | | |
| 6 | smell | | |

STIMULUS - 22. Whistle

- | | | | | | |
|-----|--------------|----|---------------|---|-------------------------------|
| 131 | stop | 31 | shrill | 8 | horn, sharp, work, music |
| 89 | train | 26 | boy | 7 | yell. policeman |
| 73 | noise | 24 | man | 6 | tone, teeth, shout, high, pop |
| 62 | sing | 21 | lips | 5 | happy, toot, bell |
| 56 | blow | 18 | wolf | 4 | talk, pucker, note(s), bird |
| 49 | tune | 17 | loud, call | 3 | twist, wood, tin, seven |
| 39 | girls, sound | 15 | mouth | | |
| 37 | dog | 11 | cop | | |
| 33 | scow | 10 | woman, police | | |

STIMULUS - 22. Whistle (continued)

- | | |
|---|--|
| 2 | purse, shriek, pipe, sweet, dark, bait, scream, signal, mother, hard, hum, holler, drink, whistle, hear, flirt |
| 1 | kettle, blew, wolf-call, wooden, screen, face, gym, cord, harsh, game, fellow, pierce, screech, melody, pursed lips, read, pretty, bark, at, small, orange, Joe, locomotive, basketball, speech, French, watch, silver, circle, low, wait, ear, wind, find, short, jay, start, Elita, referee, smile, station, ring, tongue, come, stopped, nice, long, fun, sport |

STIMULUS - 23. Woman

- | | | | |
|-----|--------------------------|---|--|
| 636 | man(e) | 4 | old, figure, whistle |
| 88 | girl | 3 | love, skirt, wife, pretty, beauty |
| 75 | child | 2 | purse, soft, set, mom, boy, friend, furs |
| 16 | mother | 1 | shape, adult, little, talk, wow, apron, her, femininity, shawl, body, Betty, bag, face, hourglass, shop, looks, Eriya, date, tender, pregnate, Marilyn, Nancy, birth, gentle, kind, Ardis, block, feminine, beautiful, work, goal, breast, fat, dog, blouse, Barb, teacher, frau, lovely, short, head, ill, prostitute, stocking, furcoat, crown, tall, femininistic, women, ha, blind, bad, world, call, read, blonde, Ann, flirt |
| 15 | lady | | |
| 12 | dress | | |
| 11 | sex | | |
| 8 | female | | |
| 7 | nice, clothes, hat, hair | | |
| 5 | baby, cold | | |

STIMULUS - 24. Cold

- | | | | |
|-----|--------------------|---|---|
| 348 | hot | 5 | sneeze |
| 218 | snow | 3 | day, coat, wind, air, cough, freezing, temperature |
| 168 | warm | 2 | sweat, shiver, ill, night, shower, brrr, chilly, white, head, room, icy |
| 66 | winter | 1 | clover, jacket, sharp, water, clothes, brisk, bitter, icicle, hoarse, zero, degree, steel, slow, angry, war, artic, old, sniff, coal, sore, Al, discomfort, slow, woman, out, sun, radiator, shelter, side, drip, today, ball, blue, school, dry, frost, clouds, yes, warming, had, uncomfortable, hand, drinks, pain, shoulder |
| 29 | ice | | |
| 13 | wet, Minnesota | | |
| 10 | dark | | |
| 9 | sick | | |
| 8 | heat, weather | | |
| 7 | outside | | |
| 6 | nose, hard, freeze | | |

STIMULUS - 25. Slow

- | | | | |
|-----|--------|---|---|
| 752 | fast | 8 | turtle, poke, traffic |
| 23 | car(s) | 7 | walk |
| 22 | stop | 6 | speed, go |
| 17 | down | 4 | quick, streetcars, lazy |
| 12 | snail | 3 | sluggish, pokey, drive, boat, driver, ant, movement |
| 10 | sign | | |
| 5 | train | | |

STIMULUS - 25. Slow (continued)

2 sleat, skid, stop sign, bus, dog, run, easy, moving, street, move, light
 1 stupid, bear, Ford, lag, drag, work, walking, speedy, caution, roads,
 dance, psychology, slide, woman driver, dull, laborious,
 brain, good, dark, nervous, driving, sticky, steady, wagon, Mols.
 streetcars, late, highway, now, plane, clock, crawl, country, white,
 round, cow, soft, stream, plow, motion, mother, slug, women, music, cold,
 molasses, roommate, hard, horse, long, Jean, curve, tortoise, glow,
 policeman, river, accident, heavy, halt

STIMULUS - 26. Wish

124	want	4	have, could, happy, request
118	dream	3	happen, magic, luck, good, chicken, not.
112	desire		receive, fulfill, do
99	hope	2	prayer, child, day dreaming, reward, song,
70	well		grant, demand, here, rainbow, were, had, horse,
60	think		ask, die, wishful, idea, I, like, fish, penny
48	star(s)	1	thumb, time, happiness, water, fairy tale,
35	bone		pond, Cinderella, may, was, myself, useless,
33	ring(s)		secret, game, gratification, vague, call, boy,
14	wash		man, try, behave, howl, object, gotten, win,
12	thought		can, resourceful, longing, bath, beggar, forget,
10	money, true		regret, okay, cat, idealist, forever, finger,
9	get, command		obtain, would, you were here, Joan, take,
8	for		marriage, surprise, war, hawks, keep, subjunctive,
7	Christmas		quirer, fulfillment, reply, must, three, sleep,
6	thinking, fairy, birthday		present, travel, party, false, candle, nice,
5	make, wishbone, gift, you, will, car		believe, granted, sing, help, what, wealth, repeat, school, give, health, house, materials, anything, poet, tale, dish, to, dramatick, women, dreaming, response, need, me, something, always, clear, promise, aim, love, sex, say, order, know, pray, comfort, turkey, try, movie, ideal, life

STIMULUS - 27. River

246	water	5	mountain, bridge, swift, ocean, long, winding, brook
211	stream	4	swim, rapid, tree(s), white, sea
105	lake	3	cold, wind, flowing, Styx, falls, dirty, road
86	Mississippi	2	slow, flood, Nile, St. Marie, black, brown,
38	boat		H ₂ O, pond, Jordan, green, hill, Minnesota,
29	deep		Ganges, large, wash
16	wide	1	Thomas, side, liver, grass, scenery, trout, Po,
14	flow, run		mud, flying, twist, muddy, garden, man, skate,
12	creek, bed		drive, interesting, fare, dam, life, India, bad,
11	blue		rock, Des Moines, summer, swamp, valley, lazy,
8	wet		skating, sleep, dark, song, trail, woods, trans-
7	Red, fast, fish		portation, tile, swan, swimming, jump, abyss,
6	bank, ice, bend		town, torrent, land, gorge, old man, tight, Rio, row, mouth, was, marsh, Volga, Weser, old, narrow, boating, ground, cross, Souix St. Marie

STIMULUS - 28. White

17	black	6	cloud, bear, rat, pure
136	snow	4	beautiful, sheet
39	dark	3	cloth, wash, sky, nurse, wedding, dress, cat
24	light	2	bright, gown, rain, horse, shirt, rose, cotton
23	house		
12	blue	1	crayon, brown, bells, spotless, milk, lace,
11	red		bird, scarf, cool, cliff, rabbit, Virgin Mary,
10	clean		river, wall, water, yellow, dog, ball, boy,
8	color		warm, bride, brilliant, green, colt, sacred,
7	Christmas		earth, no, dove, show, ambulance, slow, uniform,
			gray, bright, face, hair, gold,
			hack, glare, castle, skin, white, sands, chalk,
			hospital, paper, blanket, tie, marble, angel,
			straight, linen, blank

STIMULUS - 29. Beautiful

209	ugly	3	sweet, wonderful, hair, color, painting, tree, sky
144	pretty	2	tall, blonde, cute, dumb, view, beauty, house, horrible, exquisite, sunset, butterfly, song, Marilyn
142	girls	1	America, line, exciting, dark, car, white, scenic, attractive, adobe, deer, gay, appearance, church, black, joy, hills, Shirl, plain, pink, country, delicate, summer, mirror, man, red, blue, garden, neat, art, person, ring, Mary Ann, sex, light, for spacious, Ester, dull, like, countryside, terrific, body, bountiful, handsome, pleasing, good looking, colorful, skin, awful, angelic, river, looks, star, girlfriend, fine, brown, face, door, dress, intelligent, see, moonlight, water, window, happy, dog, orderly, glass, lack, forests, schön, slick, doll, icicle, knockout, fair, eyes, actress, awful, desirable, morning, religion, sad, deep, spring, night, bird, Cinderella, object, heavens, enchanting, wish
106	woman		
67	homely		
45	lovely		
23	nice		
18	picture		
15	lady		
12	flowers		
10	mountain, snow		
7	Ohio		
6	music, scene, good, soft		
5	day, lake(s), scenery		
4	gorgeous, nature, dreamer, queen, landscape		

STIMULUS - 30. Window

191	door	11	ledge
171	glass	10	scene
126	pane	8	outside, chair
66	shade	7	sash, clear, frost
59	light	6	bay, snow
49	sill	5	air, high
33	see, house	4	picture, box, wash, room
28	open	3	opening, woman, transparent, screen, sight, tree(s), sun, wall, washer
23	look		
20	curtain		
12	frame, view		

STIMULUS - 30. Window (continued)

- | | |
|---|--|
| 2 | seat, shutter, dressing, street, porthole, hole, fenetre, home, dirty, space, flower |
| 1 | large, sky, dream, wind, landscape, mirror, cloud, curtail, scenery, bench, cleaner, storm, shop, bars, wiper, wood, vision, break, cold, nice, floor, peek, man, million, shelf, people, broken, ear, bright, rain, outdoors, buildings, shopping, peeper, shape, orphan, wide, world, cord, old, husband, rock |

STIMULUS - 31. Rough

- | | | | |
|-----|--|---|---|
| 439 | smooth | 3 | skin, surface, even, golf, stone(s), edge, emery, street(s), field, hewn, brown |
| 69 | hard | 2 | cowboy, calm, football, heavy, feel, land, life, course, house, weak, easy, bark, light, bump, wool, gentle, nut(s), guy, citizen, ice, beard, stucco, uneven, time, bad, paper, cement, pebbles |
| 44 | road | 1 | log, tumble, cough, stuff, red, wind, hazy, steep, test, dirt, zoology, dog, difficult, iron, shod, file, it, character, handle, noise, wall, terrain, women, north woods, plow, whiskers, tweed, icy, row, sandy, painful, post, lumber, hilly, game, hills, stiff, sled, headache, finish, west, boy, criminal, sport, touch, math, CE 142, cold, waves, stick, heart, corduroy, enoot, rocky, callous, picture, riding, shallow, morning, bumpy, texture, chair, gang, cut, Superior Wisconsin, plowing, grass, unsmooth, ride, sewage, physics, strong, fought, table, saw, long, tender, chapped, sides, frog, going, fast, tangle, brush, scratch, nail, estranged, sailing |
| 42 | tough | | |
| 38 | soft, sandpaper | | |
| 26 | hand(s) | | |
| 18 | ready | | |
| 15 | coarse | | |
| 11 | wood | | |
| 10 | riders, rugged, sand | | |
| 7 | man, board(s) | | |
| 6 | sea, ground | | |
| 5 | gravel, sharp, water | | |
| 4 | jagged, dark, harsh, weather, mountain | | |

STIMULUS - 32. Citizen

- | | | | |
|-----|------------------------|---|---|
| 114 | U.S.(A.) | 4 | city, patriotic, public, town, ship, John Doe, comrade, nation, aid |
| 112 | man | 3 | community, democracy, world, individual, loyal, upstanding, duty, friend, yes, rights, Russia, president, native |
| 105 | person | 2 | convict, plebian, slave, not, myself, criminal, non-citizen, fellow, traitor, paper, free, solid, committee, army, French, Ike, voting, pol.sci., Roman, enemy, building, bad, mayor |
| 92 | American | 1 | resident, guilt, patriotism, communist, court, patrician, privilege, courthouse, inhabitants, back, politics, exile, freedom, bold, human, history, bank, teacher, neighbor, official, red, mercenary, social contract, Minneapolis, Greece, displaced person, spy, peasant, constitution, boy, partiant, king, council, taxpayer, leg. Jones, heel, staunch, tired, mean, navy, flea, judge, bourgeois, united, mister, police, belong, citizen, revolution, take, proud |
| 87 | country | | |
| 79 | alien | | |
| 39 | people | | |
| 35 | state | | |
| 22 | vote(s) | | |
| 15 | me, patriot | | |
| 13 | flag | | |
| 12 | voter | | |
| 11 | foreigner, government | | |
| 10 | America | | |
| 9 | Paine, France | | |
| 7 | foreign, good | | |
| 6 | Kane, immigrant | | |
| 5 | Genet, soldier, member | | |

STIMULUS - 32. Citizen (continued)

1 naturalisation, club, panic, number, big wheel, natural, sucker

STIMULUS - 33. Foot

232	shoe(s)	4	head, 12 inches, hurt
198	hand	3	finger(s), kick, step, slipper, sleep, body
191	toe(s)	2	pad, stool, wear, bed, ruler, ache, small,
118	leg		ped, pound, note, big, walking
26	soldier	1	rat, horseback, snow, football, person, knee,
23	feet, ball		physics, dog, hander, mule, wall, skin, rest,
14	walk		galosh, wash, hat, bone, lye soap, broke, ski
13	ankle		boots, pedal, cement, doctor, fly, sidewalk,
10	arm		essential, end, sole, bath, limb, nail, brake,
9	score		distance, smell, print, hang, measure, stand,
8	inch(es)		club, appendage, slow, web, large, band, cold,
7	boot		rabbit, shoulder, stocking, spider, operation,
6	yard		asleep, stub, mark, powder, below, ground,
5	sock(s), mouth		movement, length, frozen, ungainly, traveler,
			athlete, afoot

STIMULUS - 34. Spider

454	web	3	ish, widow, fright, arachnoid, net, dog, eight(8)
152	insect	2	wall, Tarantula, dark, crawling, run, zoology,
97	bug(s)		(Miss) Muffet, creepy, icky, snake, horrid,
50	leg(s)		scared, cobwebs, bird, poisonous
37	fly	1	mouse, mites, small, feelers, interesting,
34	black		Lady Bug, insect, beetle, shiver, cockroach,
18	crawl		orthoptera, alarm, avoid, gray, spiderweb, cat,
16	animal		corner, distaste, spinning, ugh, morbid, awful,
12	ant		horrible, rat, claw, boy, jump, fur, scream,
9	Black Widow		unbeneficial, pan, room, evil, bare, furry,
6	fear, poison		unpleasant, squirm, chills, sit, life science,
5	afraid, worm		arm, shape, thin, man
4	bite, spin, ugly		

STIMULUS - 35. Needle

454	thread	3	yarn, stick, shot(s), long, hurt, string,
140	pin(s)		injection, hay
72	eye	2	stack, art, embroidery, tree, pine, knitting,
64	sew		spool, tailor
55	sharp	1	record, needle, threat, foot, spin, magnet,
44	haystack		nose, craft, blood, hot, valve, button, barb,
27	point		dragon fly, hypo, me, pinetree, stab, jab, soap,
22	prick		machine, phonograph, pierce, use, thin, shall,
18	sewing		metal, sewing machine, head, knit, instrument,
5	pain		narrow, pricked, finger, plasma, addict, sliver
4	steel, cloth,		
	thimble, hole,		
	doctor		

STIMULUS - 36. Red

221	white	5	apple, bull, dress
196	blue	4	warm, commie, dark, head
124	black	3	cap, hat, paint, spy, sea, danger, sweater, house, China
93	green	2	cape, underwear, sunset, mad, ball, star, dog, pink, tape, anger, crayon, eye(s), paper, sails, shirt
46	color	1	rage, heat, sign, incorrect, face, purple, hurt, communism, ink, brilliant, jacket, sun, beautiful, handkerchief, wagon, vibrant, beard, Christmas, blanket, string, orange, lipstick, stoplight, sheep, feather, heifer, left, sharp, exciting, pen, carpet, flame, hood, nose, USSR, dept., hue, deep, cow, bee, alive, heart, girl, skirt, school, barn, flier, shy, velvet, Indians, painting, wine, clothes, nose, lips
29	blood		
23	communist		
19	yellow		
17	flag		
15	bright		
10	light		
9	hot		
8	hair, shoes, stop		
7	Russian, river, cloth		
6	Russia, coat, fire		

STIMULUS - 37. Sleep

236	bed	3	dark, lay, eyes, long, quiet, insomnia, drowse, relax
110	rest	2	classes, morning, slept, sick, health, die, peaceful, more, walker, study, baby, anger, down, girl, mutton
100	awake	1	now, black, hunger, dog, haven't, sheets, in, resting, stop, recline, out, home, bear, closed, yawn, nod, bliss, sleepy, need, happy, wakefulness, lots, talk, little, mattress, wake up, grass, lounge, eye-lids, me, pills, late, dead, more off, pleasure, work, pill, hard, No-Doz, block, til-noon, ease, best, nothing, light, nap, drowsy, hours, wool, stand, child, don't, window, rise, soundly, stop, satisfy, enjoy, silent, blanket, covers, tire, nod
90	tired		
81	dream		
48	wake		
44	night		
22	eat, comfort		
21	sound		
19	slumber		
17	snore		
11	pillow, deep		
8	good, soft		
6	awaken, walk		
5	well, peace, nice		
4	drink, tight, doze		

STIMULUS - 36. Anger

353	mad	6	joy, mean, fury, frustration
83	fear	5	friendly
61	hate	4	sorrow, shout, person, emotion, sad, bad, hot, boy,
49	rage	3	laugh, madness, calmness, hat, dislike, yell, tears, eyes, kind
35	temper	2	swear, pain, soft, teeth, noise, frown, hard, me, pleasure, jealousy, cross, frustrated, afraid, harsh, fire, hunger, peace, loud, strike, hope, psychology, fool, cry, heat, life, violence, voice, furious, women, stubborn, terror, want, torment, mood, regret, tense, fit, placid, adrenalin, rest, headache, danger, divorce, foolish, still, get, delight, fierce, happiness, clamor, blush, pleasing, pleasant, nasty, high blood pressure, charity, fearful, rashness, gentle, friend,
28	red	1	
21	ire, wrath		
20	happy,		
19	fight		
13	hatred		
12	man		
11	fright		
10	calm		
8	hit, love		
7	hurt, disgust		

STIMULUS - 38. Anger (continued)

- 1 knife, black, face, resentment, bitter, will, scream, like, pride, kids, insult, sweat, anger, burn, jump, severe, irate, uncomfot, malice, sound, excitement, mother, sore, smile, sadness, grief, scorn, baby, yell, sweetness, confusion, disturbance, stomach, growl, dog, crazy, parents, blocked, cool, tranquility, annoyed, teacher, threat, joyful, thirst, desire, Helen, patience, soothe, surprise, pout, irritability, set, sullen, deep, solitude, upset, rouse, unpleasant, laughter, fist, cruel, tired, gutburst, disturb, mildness, worry, contempt

STIMULUS - 39. Carpet

- | | | | |
|-----|---------------------|---|--|
| 460 | rug | 5 | deep, magic, wool, blue |
| 165 | floor | 4 | living room, beetle, plush, color |
| 82 | soft | 3 | comfort, smooth, mat |
| 27 | red | 2 | mohawk, table, weave, Persian, warm, black, slipper, clean, hall, vacuum, feet(foot), grey, rough, cloth |
| 21 | sweeper | 1 | sit, slip, new, cleaner, maroon, mop, door, beater, lecture, rich, scold, brad, nap, nail, topaz, cover, broom, dean, spring, lounge, none, lay, rag, long, shoe, wine, caps, flew, dirt, role, flat, white, pretty, flowers, wet, pillow, covering, knee, velvet, depth, Bagdad, army, use, washer, called, blanket, nice, flying, dad, furniture, weaving, brought, design |
| 20 | tack | | |
| 17 | walk | | |
| 16 | bag | | |
| 11 | room | | |
| 10 | house, bagger | | |
| 9 | green | | |
| 8 | chair, thick, sweep | | |
| 6 | home | | |

STIMULUS - 40. Girl

- | | | | |
|-----|---------------------------|---|--|
| 704 | boy | 2 | dance, Mary, party, Joan, laugh, Shirley, guide, house, curls, high school, bed, pigtails, she, we, car, child, fine |
| 49 | woman | | |
| 18 | friend | | |
| 17 | young | | |
| 14 | dress | | |
| 13 | pretty | | |
| 11 | hair, nice | | |
| 10 | man | | |
| 7 | beautiful | | |
| 6 | scout, cute, school, date | | |
| 5 | female | | |
| 4 | lady, sex, good, love | | |
| 3 | hat, girl, student | | |

STIMULUS - 41. High

675 low
49 school
32 mountain
18 up
17 chair, tall
13 tower
11 jump
10 ladder
8 noon, building
7 above, cliff
6 sky

5 drunk, hill, heels
4 wide, top
3 wire, down, long, horse, bridge, height, moon, shoes, clouds, place, fence, steep
2 fall, short, dry, way, wind, liquor, ceiling, wall, dizzy, perch, plane, airplanes
1 Scotland, lights, table, giant, deep, music, mighty, huge, climb, dive, fun, tall building, scaffold, water, sick, lofty, score, ball, ambitions, beyond, stepladder, note, peak, big, broad, board, kite, room, round, eight, river, ride, beer, Foshay tower, mark, white, small, diving, diving board, window washer, toll, fly, steeple, space, strong, bar, high chair

STIMULUS - 42. Working

132 herd
99 loafing
79 sleeping
65 playing
48 man
45 money
42 resting, labor
40 lazy
29 job
28 tired
18 hours
13 rest
11 fast
9 busy, school
8 pay, play
7 sleep, doing, loaf, studying
6 sweat
5 store, fun, work, idle, time

4 girl, hours, sweating, slow, people, late, wages, relaxing, eating, slaving, hospital, laboring
3 fatigue, sitting, leisure, typing, toil, no, earning, out, tools, shovel, office, class, summer
2 stopping, day, relax, boredom, vacation, haul, effort, studies, railroad, rough Dayton's, helping, shop, bad, book, conditions
1 hand, father, Jim, dislike, payday, trouble, nix, help, carpenter, moving, hay, brand, tail, perspiration, dough, machines, table, plugging, if, drudgery, mop, telephone, truck, gravel, sick, east, bench, move, slave, sit, do, had, monotonous, mine, hurry, lend, progress, parking lot, clerk, stop, steady, La Belle, axe, digging, shorthand, problem, too much, boss, music, crew, factory, exercise, nights, action, tough, dogs, reactor, cold, lax, laborers, ish, skilled, non-employed, production, law, Sears, straining, house, sledge hammer, occupation, desk, thinking, powers, roof, bricklayer, drawing, good, part-time, singing, flour, bank, waste, quiet, shift, cafeteria, not, shoes, drugstore, run, unemployed, barcade, saw, task, making, soft, living, sewer, talking, diligently, women, walking, streetcar, shoveling, college, with

STIMULUS - 43. Sour

568 sweet
91 grapes
63 lemon
60 bitter
40 milk
24 taste
22 cream
21 dough
18 apples
14 pickle
12 vinegar

6 bad
5 fruit, grapefruit, mash
4 puss, whiskey
3 buttermilk
2 tart, acid, sauerkraut, soup, pucker
1 neighbor, cheese, wine, green apple, sleep, alum, dish, stale, sugar, can, distaste, good, plum, hurt, awry, orange, bad taste, chocolate milk soured, tongue, lunch, juice, dry, food, spit, disagreeable, high, mix, earth, gin, bread, pop, spoiled, pie

STIMULUS - 44. Earth

130	round	4	big, good, life, people
118	dirt	3	brown, clay, tremor, sod, red, crust, sand, geology, stone
108	ground		
79	moon	2	plants, Venus, U.S., war, sail, ball, salt, terra, pearl, green, hill, space, cold, tumble, mover, hole, plow, grass, sea, trouble, blue, home, warm
62	sky		
60	world		
36	land		
35	planet	1	Columbus, mass, deep, loam, strength, field, depth, physics, hand, immense, steam shovel, dry, germs, astronomy, move, countries, Jupiter, food, grain, rotation, science, dirty, work, live, foundation, Pearl Buck, soiled, rocket, farm, body, wander, sad, spin, mine, smell, solar, store, God, rich, mother, crusher, crops, gravity, hemisphere, gravel, fire, rock, revolving, solar system, rotate, wet, nice, atmosphere, north, below, dark, low, mountainous, equator, shake, garden, molten, ocean, metals, geography, white, earth, misery, sound, bound
33	soil		
28	sun		
26	globe, heaven		
22	worm		
16	Mars		
14	universe		
7	black, hard, man		
6	star		
5	water, mud, sphere, tremble, quake, air		

STIMULUS - 45. Trouble

39	bad	4	comfort, ill, law, hate, unhappy, people, work, smooth, some, unhappiness, wrong, bother, world, error
47	shooter		
45	worry(ies)	3	sin, me, care, hardship, scared, sick, time, ail, mad, pleasant, court, solution, bothered, toil, confusion, unpleasant, girl(s), misfortune, woe
41	danger		
32	sorrow	2	nerves, concern, turmoil, peaceful, children, tough, joy, gun, crying, enemies, good, water, cause, mischief, rough, with, punishment, O.K., mistake, brewing, illness, black, angry, now, psychology, safe, tail, pleasure, trial
26	fear		
24	school		
23	problem	1	worth, complex, neat, many, sweat, dutch, cry, headache, luck, dislike, arrest, study, in, much, worried, forget, marry, sleep, calm, kind, aid, Mr. Bengston, excited, horror, need, exams, blues, basketball, innocent, free, involved, soft, quarrel, travail, alley, gripe, distress, Russia, frustrate, scold, web, brig, theft, God, crook, mine, relatives, class, soldier, murder, content, muddle, witch, aggravation, streetcars, rest, discouragement, necessary, crash, distant, guest, freedom, conscience, frown, non-trouble, hard times, disgust, gasp, party, dick, death, Janet, safety, counsel, annoy, conflicts, air, teacher, delinquent, business, flunk, terror, U. of M., brother, negro, food, disturb, me, test, discontent, dark, trick, despair, sinister, seen, irk, sound, helpless, discomfort, home, criminal, Madame Butterfly, do, strife, Korea, kids, uneasy, weak, crime, ticket, disturbed, car, shoot, more, land, trouble, ahead, father, Bob, spot, harmony, sorry, disease, fine, evil, fix, family, teeth, kill, yes, come, worried, nothing
20	police		
19	fight, sad		
18	happy		
17	difficulty(ies)		
16	space		
15	hard		
14	help, maker		
12	jail, anger		
10	man(en), pain		
9	double, ease, war, bubble, cop(s)		
8	woman(en), anxiety, easy, fun		
7	sadness, grief		
6	miss, boy, car, happy, sickness, accident		
5	disaster, money, mess		

STIMULUS - 45. Trouble (continued)

- 1 Jerry, S.A.B., night, scrap, avoid, jam, starter, spinster, punish, argue, hurt, comfort, econ., uneasyness, hope, eat, some, slow, word, trying, beef, quiet, run, no, face

STIMULUS - 46. Soldier

- | | | | |
|-----|----------------------|---|---|
| 187 | army | 4 | captain, rifle, brother, field, infantry, military, service, ROTC |
| 182 | sailor | 3 | friend, officer, shoot, warrior, khaki, Ike, marching, me, marine, private |
| 101 | man(e) | 2 | helmet, tin, carbine, weapon, air force, cross, command, wac, death, (h)gah, citizen, airman, good, brave, straight |
| 87 | war | 1 | woman, leave, peace, pony, discipline, person, Hank, nurse, future, enemy, sucker, dummy, put, hero, sergeant, suit, policeman, "loogie", fire, statesman, Napoleon, gay, woody, fighting, halt, excitement, guard, shoe, peon. guy, U.S.A., sing, orders, steel, German, away, hurt, airdale, John, open, medal, country, trap, care, discharge, scar, chocolate, fool, major, O.K., walking, tan, combat, two years, grey, doggie, jerk, wife, enlistment, battle, where, murderer, head, dirty, cute, strong, fortune, general, arms, three, walk, brass, nuts, slave, rank, patrol, jed, courage, salute, armed, olive drab |
| 86 | gun | | |
| 56 | uniform | | |
| 40 | fight | | |
| 23 | boy | | |
| 17 | Korea | | |
| 12 | march | | |
| 9 | foot, civilian | | |
| 8 | G.I. | | |
| 5 | draft, fighter, navy | | |

STIMULUS - 47. Cabbage

- | | | | |
|-----|-------------------|---|--|
| 165 | head | 9 | ham |
| 149 | lettuce | 7 | king, fruit |
| 139 | vegetable | 6 | rabbit |
| 80 | food | 5 | cook(ed), field |
| 54 | salad | 4 | cole slaw, sour, eating, round, can |
| 51 | eat | 3 | kraut, vinegar, worm, odor, stew, garbage |
| 47 | green | 2 | boil, raw, spinach, waste, beet, meat, good |
| 34 | garden | 1 | heat, sauce, dinner, bad, celery, beans, boiled, hard, lousy, jiggs, skunk, insect, ugh, burn, red, cream, crisp, vegetable soup, ish, dorm, steps, pigs feet, apple, chew, stink, cauliflower, nasty, spareribs, taste, root, money, weiners, terrible, rhubarb, rutabaga, corn, man, butterfly, cheese, distaste, grape, broccoli, hay, pail, bundle, kitchen, dressing, bag, horrible |
| 27 | leaf | | |
| 22 | sauerkraut | | |
| 19 | smell | | |
| 16 | slaw | | |
| 15 | patch | | |
| 14 | plant | | |
| 11 | carrots | | |
| 10 | corned beef, soup | | |

STIMULUS - 48. Hard

- | | | | | | |
|-----|--------|----|---------------|---|-------------------|
| 674 | soft | 16 | work | 9 | nail |
| 48 | rock | 13 | head | 7 | ice, tough, table |
| 24 | easy | 12 | stone, smooth | 6 | floor, ground |
| 23 | egg | 11 | steel | 5 | difficult, metal |
| 19 | boiled | 10 | wood | | |

STIMULUS - 48. Hard (continued)

3 rough, tack, solid, brittle, light, candy, bed, diamond, man, surface
 2 board, pencil, shell, luck, ball, top, knock, hand, iron
 1 hunt, box, school, cash, salt, hit, point, set, get, cold, money, brick,
 cement, shiny, block, effort, secure, pool ball, sidewalk, hammer, feel,
 bread, firm, liquor, peanuts, compact, apple, touch, knife, glass,
 lumpy, desk, adamant, breaks, angry, leather, sauce, hurt, rubber,
 headed, stiff, larl, way, auto, lead, soon.

STIMULUS - 49. Eagle

550	bird	4	dollar, gold, air
72	fly	3	lion, sparrow, colonel, army
34	scout	2	wren, spread, liberty, robin, majestic, birch,
28	wings		rock, free, country, double, vulture, large,
23	nest		animal, power
16	bald, America	1	cyrie, uniform, fish, squadron, \$10, brush, owl,
14	U.S.		parrot, big, soaring, globe, tear, egg, noble,
13	symbol		bend, Bernie Dawman, gray, monarch, craig,
12	flag, beak		victory, football, trees, strength, bugle,
11	sky, hawk		banner, summit, neat, chicken, north woods,
10	high		erne, pencil, colored, duke, beaver, cliff,
9	soar, feathers,		head, indian, temple, falcon, patriotism, a,
	flight		quarter, mighty, switch, dive, buzzard, freedom,
8	emblem, flying		might, sharp, polka, stop, point, sharpness,
7	eye		golden, screech, field, talon, keen
6	coin, claw, money		
5	mountain		

STIMULUS - 50. Stomach

211	food	5	liver, muscle, head, mouth
210	ache	4	sour
86	eat	3	soft, juices, gastric, inside, sore, zoology,
69	intestine		person
47	ulcer	2	sickness, sack, appendix, man, health, anatomy,
42	hungry		viscera, ill, indigestion, round, kidney, hit,
28	body		digest, growls, gas
23	organ	1	green and white, ulster, lunch, satisfied, throat,
20	pains		vomit, film, churning, gastric juice, science,
18	hunger		lung, cast iron, me, butterflies, HCl, cavity,
13	belly, pump, full		saliva, cramp, gastro-vascular, nerves, throw-up,
11	digestion		peptic, smooth, fat, ear, feed, low, disorder,
10	trouble, gut, sick		grind, esophagus, orange, worm, bear, cancer,
8	eating, hurt		burp, pylorus, pot, turn, diaphragm, hand, fill,
7	abdomen, empty,		duodenum, large, leg, part, want, middle,
	flu, heart, upset		physiology

STIMULUS - 51. Stem:

402	flower	4	stalk, fruit, bulb
224	plant	3	twig, stem, from, petal
125	leaf(ves)	2	core, response, long, brain, bird, leg, tide, water, tulip, words, limb, watch
47	root	1	thread, come, asparagus, blossom, cherry, pear, blade, flow, wind, hay, pistol, flat, base, NR, rhubarb, start, bowl, bottom, handle, vapor, verb, weed, lem, pumpkin, botany, tip, worm, stipules, reed, grass, ground, vascular, locom, string, line, ocean, wine, mushroom, psych.
27	tree		
16	branch		
12	stern, pipe		
11	rose, lamp		
3	apple		
7	glass, bud, trunk		
6	green		

STIMULUS - 52. Lamp

633	light	5	bright, read, chair, lighter
125	shade	4	on
62	table	3	stand, bed, dark, burn
35	bulb	2	base, Aladdin, oil, see, glow, lamp, study, stem, chimney
25	pest	1	house, cottage, living room, stove, filament, wick, shelf, card, globe, boy, pretty, chop, animal, ugly, warm, window, power, poster, port, modern, worm, vase, broken, kerosene, tight, sun, sheep, limp, lathe, metal, electric, door, stool, glaze, pump, white, rug, electricity, odd
12	black		
8	floor		
7	desk, cord		

STIMULUS - 53. Dream

453	sleep	5	conscious(unconscious), soft
89	night	4	world, pillow, story, pleasant
50	nightmare	3	true, man, rest, funny, picture, house, daze, NR, time
35	wish	2	reality, happy, boy, see, sleeping, morning, color, desire, comfort, dark, delight, real, wander, now, dreamer, hazy, sex
31	girl	1	slept, child, image, people, snakes, mind, blue, boy, pit, float, last nite, nest, trip, intense, come, peace, mediate, idea, walking, you, read, queer, subconscious, Bing Crosby, fear, Rick, concerts, ugly, about, expression, gaze, plan, adventure, ecstasy, nope, light, asleep, Marilyn Monroe, night-time, memory, symbol, have, Bill, dream, lazy, auto, slow, beauty, confession, avid, when, white, car, content, best, playing, tired, forget, yellow, scream, drifting, psych., illusion, Roger, pleasure, love, land, figure, always, scene, imagine, Darlene, analyze, of
25	day		
22	bed		
17	boat		
15	good		
14	think		
13	awake		
10	vision		
9	clouds		
8	daydream, nice, sweet		
7	fantasy, wet, bad, thought		
6	Freud, wake		

STIMULUS - 54. Yellow

156	blue	6	corn, lemon, butterfly, dog, banana
115	red	5	sea, river, car, chicken
106	color	4	caution, jacket, pretty
89	green	3	room, pink, sweater, bed, rose, jaundice,
73	black		Jap, Chinese.
29	flower, brown, white	2	bellied, purple, sunflower, picture, bee, sky, fellow, kitchen, wall, daffodil, soft, afraid, spread, daisy, man, shirt, belly, convertible
24	orange, bright	1	carrot, cold, paint, mine, sign, seeds, race, fruit, dye, board, leave, crayon, cloth, eyes, scared, stoplights, fly, doll,
21	butter		pear, ugly, top, badge, jack, yarn, egg, flat, narcissus, mountain, guts, band, pus, violet,
17	sun, coward		tulip, slow, bend, streak, maid, stripe, mafia, sap, wheat, stone, back, bulb, scarf, spider, cloud, circle, stars, shade, pencil, wallpaper, straw, rod, man, bug, taxi, hornet, coin, head, orchid, sick, dandelion, flag, hazelnut
15	birds		
12	gold		
11	cab, light		
10	canary		
9	hair, fever		
8	ribbon		
7	dress		

STIMULUS - 55. Bread

6 10	butter	6	knife, wine, crust, slice, rolls
94	food	5	leaf
76	eat	4	cake, wheat, toast, sandwich
29	water	3	box, rye, basket, hunger, board, yeast, soft, starch, brown, good
15	white	2	fresh, stale, hungry, meat, dark, fruit, hard, line, rise
14	milk, jam	1	gray, moist, wrappers, home, pork, Greek, plate, course, homemade, rice, stomach, staff of life, raisin, carbohydrate, juice, penicillin, muffin, cutter, cut, lunch, crumb, sunflower, texture, tasty, pan, dry, Master, salami, bun, staff
11	flour		
9	jelly		
7	dough		

STIMULUS - 56. Justice

250	peace	3	statue, honor, none, duty, black, mercy, cops, Holmes
182	law	2	balance, lack, America, democracy, equal, Plato, unfair, robe(s), triumphs, punishment, honesty, Supreme Court, power, fairness, righteous.
163	courts	1	fruit, guilty, peach, U.S., Aristotle, deceit, land, prevails, legislative, now, person, true, F.B.I., unjust, illegal, just, office, jail, essential, impartial, order, chief, rule, war, marshall, criminal, of, graft, command, suspect, city, to be done, chos choo, irony, die, uncle, Galsworthy, unknown, maljustice, stern, done, clear, grace, word, day, slow, light, due, judiciary, preacher, legislation, love, cruelty, desire, goodness, prison, grape, hope, marriage, boy, worthy, fear, women, football, Jean Valjean
102	judge(s)		
38	injustice		
33	right		
12	liberty, good		
9	truth, government, jury		
8	blind, fair		
7	man, supreme		
5	of-the-peace, crime, trial, department		
4	equality, police, freedom, scale(s), evil		

STIMULUS - 57. Boy

762	girl	3	rough, blue, son
41	man	2	toys, sex, barefoot, boy, gal, bad, wagon, youth,
37	scout		
10	dog	1	corduroy, dirty, hair, Jr., Winslow, father, dirt, naughty, love, brat, crewcut, nephew, sign, clothes, pep, oh boy, ball, outside, stone, cap, bat, ball, trousers, fun, O, trouble, date, hit, playing, sports, fight, nappy, blonde, kite, young man, Brian, football, short pants, eager, gargon, hunt, carving, cott, pal, soldier, son, curly, ship, mischief, sir, pants, person, he, stop, Roger, brown,
8	olay, small, friend, young		
7	brother, little, child		
6	school		
5	lad		
4	fish(i), male		

STIMULUS - 58. Light

647	dark	3	shade(s), red, brightness, yellow, heaven, color, weight
78	lamp	2	shadow, street, health, green, hair, electric, blue, morning, match, clear
30	bright		
25	sun	1	look, shine, high, out, glass, electricity, awaken, star, sky, cheery, read, warm, sunshine, spot, club, feather, object, brown, electric bulb, hand, Edison, sound, hard, study, dark or heavy, waves, apple, path, air, luminous, beam, time, post, fair, flame, lamb, eyes, dirt, easy, creamy, hurts eyes, love, world, lift, desert, snow, lightning, year, truth, ceiling, boat, daytime, earth, beach, glow, head
23	bulb		
16	heavy, day		
12	house		
11	see		
10	window		
5	switch, soft, candle, black, heat, darkness, white		
4	night		

STIMULUS - 59. Health

250	sickness	4	center, pain, robust
160	sick	3	boy, energy, clinic, athlete, life, fine, comfort, red, fun
80	good		
75	happiness	2	blean, healthy, light, condition, building, book, class, sports, well being, eat, physical, public, strength, safety, department, medicine, teeth, pills, vitamins, insurance, school, milk, unhealthy, play
42	wealth		
36	happy		
34	well		
33	ill	1	young, PH-3, thermometer, hope, bureau, harmony, home, feel good, smile, apples, rosy, me, active, purity, youth, nurse, eager, good food, state, salud, nutrition, resort, certificate, myself, can I walk, welfare, Y.M.C.A., death, ruddy, swim, good natured, gift, smallpox, first aid, people, poor, drink, warn, public health, person, anxious, Boy Scout, radiance, standard, man, love, aspirin, green, son, 4-H, accidental, blood, I-A, 1st, mother, girl, heart, enjoyment, joy, hygiene, lively, humor, personal, trouble, feeling, weight lifting, good care, able, form, us, fit, exercise, window
29	illness		
27	doctor		
19	service		
14	strong		
12	food		
11	hospital		
10	disease		
7	body		
5	vigor		

STIMULUS - 60, Bible

236	God	4	testament, history, school, life, home, verse(s)
205	book	3	word, Lord
125	church	2	pray, salvation, love, Korean, Joseph, Psalms, right, true, "salm"
100	religion	1	bah!, ancient, gospel, English, minister, me, scripture, religious, passage, preacher
56	story(ies)		Christianity, heaven, stible, Christ and, revised, pulpit, shmbile, Christian, memory, fiction, necessary, leather, reap, newspaper, great, class, lessons, joy, Jesus Christ, teach, red, sermon, fantasy, tale, pages, Luke, bad, why, fool, ethic, law, heavy, peace, table, journey, pure, goodness, girl, false, cross, saints, great, God's word
50	holy		
39	read		
22	Jesus		
14	good		
11	Christ		
10	truth		
8	study		
7	Moses, black		
6	faith, prayer		
5	reading		

STIMULUS - 61, Memory

119	mind	9	forgetfulness, book(s)
99	remember	8	work
80	forget	7	loss
58	think	6	short, blank
41	thought(s)	5	lost, word(s), intelligence, verse
35	psychology	4	retain, read, long, know, pleasant, youth, happy
32	recall	3	sad, wish, memorize, yesterday, poem, quiz, span, idea, pleasure, remind, love, none, forget, amnesia, reminiscing, lapse
25	good	2	remembering, language, stimulus, memory, sharp, time, vision, life, elephant, poetry, objects, gone, nothing, imagination, childhood
22	dream	1	church, no good, verbal, problems, dates, lesson, forgotten, events, I.Q., class, black, land, father, text, recalling, remembrance, man, yes, retaining, of, deep, mom, behind, age, wow, hotel, hard, temporal lobe, nostalgia, plan, fly paper, absent minded, recollect, false, use, lacking, songs, mist, recognize, drudgery, fair, strong, photographic, car, knowledge, Joe, try, things, lake, experience, vivid, joke, heart, train, armory, traces, friends, response, help, lasting, urge, story, recognition, sweet, hear, tester, seem, east, learning, head, see, ship, education, hunger, girl, O.K., listen, daydream, paper, alert, numbers, sins, grandmother, retentive, system, events, serve, understanding, home,
20	school		
19	learn(ed)		
18	test, learning		
16	past, poor, image		
15	bad, retention, brain		
14	sleep		
13	thinking, lane		
11	forgetting		
10	study		

STIMULUS - 62. Sheep

201	wool	4	graze, shear, lamp
198	lamb	3	horse, follow, shorn, soft, woolly, eat, meadow, fleece, fold, fur, food, ranch
75	animal	2	hair, lanolin, graze, people, bulle, skin, steffi, calves, wolf, boy, stray
66	mutton	1	God's people, money, good, group, house, bleat, meek, mutton, legs, bells, beard, run, call, peace, farmer, creep, countryside, block, wander, hand cream, red, fuzzy, pasture, foot, sacrifice, Montana, Christmas, fat, sow, ram, jumping, prairie, grazing, style, Bible, poems, oxen, wood, deep, bed, peep, clothes, glass, cloth, hungry, wake, hoof, mouse, shearing, jump, country
64	goats		
41	dog		
39	herd		
25	black		
18	pasture		
17	shepherd, cows		
15	cattle, bar		
14	sleep, farm, count(ing)		
10	flock		
9	white		
7	fence		
6	herder, ewe		
5	field, dip, meat,		

STIMULUS - 63. Bath

314	clean	5	salts, cold
220	water	4	wet, bathtub, bubble, bathe
102	soap	3	swim, Saturday, relax, England
98	tub	2	take, sleep, oil
42	wash	1	steam, cleanness, smell, today, girl, drink, Maine, mat, Feb, basketball, Shakespeare, suds, soothing, scrub, dress, sponge, spa, draw, comfort, filth, toilet, health, refresh, naked, soft, hah, scum, dart, ish, scrub, washing, lake, use, bed, nice, batholith, hygiene, boy, home, powder, cleanse, knight, town, bird
38	shower		
23	dirty		
14	dirt, warm, cleanliness		
13	house		
10	hot		
9	towel, room		

STIMULUS - 64. Cottage

298	house	4	troos, marriage, yard, grove, stones, fun, window, roof
138	lake	3	honeymoon, seashore, swim, sea, room, shutters, cute, nice, shore, boat, peace
111	cheese	2	garden, abode, farm, Cape Cod, fishing, hill, love, live, two, for two, inn, cot, rest, log, green shutters, green
87	home	1	line, chimney, porch, contentment, grill, secluded, waterfall, book, homey, hearth, white fence, peacefulness, serenity, building, path, spa, Hasslen's, summer home, beach, hoses, river, neat, comfort, dwelling, field, landscape, beer, lea, pretty, cream, village, lamp, mountain, cottage for sale, comfortable, lane, take, dog, sale, Winchell, camp, house-lake, convenient, clean, shingle, place, fireplace, hillside, sleep, mansion, warm, housing, rail, woman, happy, scene, bed, stream, salad, little, clean, thatched, forest
33	white		
32	cabin		
27	small		
18	door		
16	fence		
14	vines		
12	country		
11	woods		
10	ivy		
9	summer		
7	roses		
6	flowers, hut, cozy		
5	vacation		

STIMULUS - 65. Swift

369	fast	5	running, Gulliver's Travels, horse(s), wind, flight, author, company
238	slow	4	arrow, Tom, Armour, shortning, book
33	river	3	chimney, cheese, speed, rush, airplane, runner, eagle, swallow
32	meat	2	Oliver, sudden, packing co., county, poet, food, blue, dog, kick, silent, mercury, creek, streaks, toedy, race
27	Jonathan	1	lightning, Charles, travel, block, work, wren, David, John, Grasso, meat packing, food company, calm, indian, writing, 220 R. etc., butter, tide, premium, strong, rifle, cream, mighty, go, cold, smooth, slick, novel, cattle, hawk, products, feet, flowing, fire, true, sad, greyhound, track, pleasant, thrust, family, clear, hurry, train, north, quickly, blow
21	current		
19	bird		
13	rapid(s), bacon		
12	water, stream		
11	quick		
10	Gulliver		
8	run, sure, ham		
7	deer		
6	car, lard		

STIMULUS - 66. Blue

175	sky	5	coat, Danube, orange, ear
160	red	4	cool, navy, ocean, baby, sea, pretty, eyes, light, river, sad
125	green	3	berries, cloth, sweater, lake, book, mood, purple
65	color	2	eagle, true, ribbon, soft, day, cheese, uniform, song, Air Force, azure, room
56	yellow	1	gown, blue, stone, mold, ink, best, ugly, limpid, sore, clouds, emotion, pie, low, tin roof, truth, ski, flower, bunny, Hungarian, angel, house, suit, nice, beauty, bonnet, sport coat, brown, clothes, bad, strip, fish, horizon, lightening, haze, tri, horn, red, white &, bull, music, blood, boat, hope, washing, bark, wide, Monday, lonely, tango, prelude, tan, beetle, light blue, soldier, virgin, south
49	black		
44	white		
36	water		
28	gray		
20	boy		
14	bird, dress		
9	pink		
8	gold		
7	night, moon		
6	flag, earth, dark, heaven, cold		

STIMULUS - 67. Hungry

362	food	4	sleepy, empty, yes, bread, person, animal, feed, pangs, now, steak
174	eat	3	country, mouth, cat, starve, fast, hungry, sad, famished, satisfied
69	thirsty	2	ache, turkey, foot, satiated, fed, bear, sick, Europe, angry, Greece
57	full	1	swallow, avid, DP, meat, ate, state, stimulus, pigs, old, knowing, grueling ingot, court, hurt, strictly, wolf, china, child, like, lips, feeling, hamburger, bird, desire, meal time, taste, all, peasants, table, rat, ravenous, mad, baby, misery, searching, tramps, priest, beer, unhappiness, 5,000, orphan, unpleasant, sister, Koreans, discomfort, thin, feast, need, real, never, green, bad, goat, pie, heart, frustration, exile, well-fed, Jack, hash, eyes, want, bed, content, not now, sails, ham
29	starved, stomach		
25	tired		
21	dog		
11	pain		
10	man		
8	eating, me		
6	people, beast, cold, starving, boy		
5	lunch, horse, dinner, appetite		

STIMULUS - 68. Priest

328	church	5	collar, pray
189	Catholic	1	bishop, priestess, preacher
80	religion	3	preach, prayer, altar, clergy, white, mass, hood
66	minister	2	religious, saint, peace, pope, doctor, high, Christ, pulpit, queer, Catholicism, Roman, cassock, teacher,
43	man	1	sleep, confession, surplice, honor, garb, think, friar, sir, person, pagan, rest, gather, marry, parish, love, official, temple, St. Thomas, fish, book, faith, beads, celibacy, understanding, prophet, flock, Catholic Church, fraud, pure, Rev., flock, Sunday, damn, potentate, solemn, song, Inca, jerk, cloak, another, sacraments, no good, oxygen, helper, single, prelate, serve, house, parson, deacon, child, convent, scientist, devil, vatican, byde, confessor, pious
25	black		
23	God		
17	robe		
14	pastor		
12	mun		
11	holy		
10	good, rabbi		
8	Bible		

STIMULUS - 69. Ocean

314	water	1	land, large, rough, depth, fish, spray, vast
233	sea	3	voyage
111	blue	2	travel, huge, roar, cold, wind, salty, H ₂ O, Indian, distance, tide, foam, swim, sail, sky
48	waves, deep	1	cape, rear, red, trip, side, beach, dark, going, vessel, white caps, perch, salt water, whiskey, baby, white, Black Sea, fog, steamer, west, tub, shore, shell, coast, seasick, beauty, Calif, breeze, bed, motion, top, roll, living, drown, earth, navy, France, gulls, deeds, pond
28	Atlantic		
20	ship		
15	lake, Pacific, wide		
11	big		
9	river		
8	boat		
7	wet, salt		
6	green, floor		
5	liner		

STIMULUS - 70. Head

129	hair	11	toilet, lettuce
126	foot	10	person
68	shoulders	8	high
58	neck	7	round, strong, mind
56	body	5	cold, nose
34	hat	4	scari, can, cheese, start, beer
33	eyes	3	mouth, ear, soft, hot, woman, stone, waiter, big, leader
31	face	2	table, people, above, John, lead, bald, brown, haircut, bed, class, food, over, bolt, chief, heels, red, first, anatomy, thought
29	top	1	organ, handsome, lavatory, looks, bathroom, on, dress, forehead, long, father, monument, torso, Sall, hunter, intelligence, behind, fat, halt, memory, house, water, cranium, move, dark, tall, guillotine, fall, John the Baptist, bottom, sick, glasses, scripture, Ruth, glove, globe, hurts, fore, horse, shoe, Chinese, cover, curly, skull, dirty, less, back, navy, storm, features, dean, before, hydraulics, dome, small, shirt, falit, coach, pate, thick, upper, thinker, band, pointed
28	hands		
23	brain, ache		
22	heart		
20	toe		
19	arms		
17	tail		
16	think, cabbage		
15	man		
14	cap		
12	hard		

STIMULUS - 71. Stove

235	hot	8	cooking, iron, gas
184	heat	7	light, range
109	pipe	6	burn
72	cook	5	furnace, pot, leg
61	warm	4	pan(s), bolt
54	fire	3	burner, pot belly, chimney, lamp
36	black	2	electric, red, house, fuel, icebox, top, old, smoke
35	oven		
23	food	1	coffee, room, handle, camping, lead, fireplace, kettle, in, lit, league, post, cook stove, poker, flame, smell, bulky, chair, tube, length, boil, bake, glow, eat, grate, big, bellow, lining, cabin, heater, white
20	warmth		
17	wood		
16	kitchen		
12	lid		
9	coal(s)		

STIMULUS - 72. Long

758	short	2	string, lean, board, horizontal, stockings, big, endless, pants, sleeve, life, river, story, hard, slim, stick
11	fellow		
10	narrow		
9	john, time	1	snake, true, winter, class, walk, wire, Macy, meter, height, for, song, trip, stretch, yard-stick, path, Louie, down, day, stand, nose, hands, dress, straight, train, around, past, jeans, stilt, large, rifle, steel, psych., pole, vacation, school, don, many, wail, feet, wait, spaghetti, tedious, legged, dog, much, bon, straws, walking, lengthy, hollow, silence, head, painful, pencil, post, angleworm, winding, gone, ribbon, hood, way, stream, shot, awaited, tail, rog, barrel, fingers, gun, horn, rod, pier
8	hair, far		
7	island, road, thin		
6	underwear		
5	leg(s), rope, tall, ruler, low, line, distance		
4	beach, run		
3	length, wide, knife, want, arm, lake		

STIMULUS - 73. Religion

285	church	4	peace, Presbyterian, prayer, sect, pray, ^{love,} man(en)
196	God	3	think, atheist, philosophy, Jesus, right, none, law, no
70	Bible		
37	faith, catholic	2	sacred, orthodox, agnostic, study, soul, pious, opium, Congregational, learning, heathen, necessary, thought
27	belief		
23	good		
22	priest	1	practice, mine, tolerance, fanatic, school, die, cross, bad, meaning, Luther, Communist, hell, mission, nun, non-religion, now, theme, race, dream, mysticism, way, argument, Newman, mad, Moses, creed, me, non, science, pew, one, nature, mass, camp, truth, St. Thomas, talk, Sunday, mystery, escape, poor, word, holiness, weak, reverence, piety, Wesley, theology, ideas, Buddhist, preacher, guidance, bishop, bunk, Jew, salvation, moral, distaste, St. Olaf, fake, foocy, fervor, denomination, mind, service, preach, ceremony, chill, ritual, trouble, bull, question, believe, moral, creek
19	Lutheran		
16	life		
11	minister		
10	protestant		
9	Christ		
8	Methodist, book		
7	Christian, holy, atheism		
6	Episcopal,		
5	Baptist, Jewish, people, Christianity, worship		

STIMULUS - 72. Religion (continued)

- 1 see, important, doctor, my own, confusion, drab, ethics, form, goofy, yes, rosary, person, orders, live, drug, cloudy, rite, hypocrite, demagoguery, hate, reverend, way of life, jack, weak

STIMULUS - 74. Whiskey

- | | | | |
|-----|------------------------|---|---|
| 284 | drink(s) | 4 | bitter, ad, booze, hot, party, no, water |
| 123 | drunk | 3 | taste, ugh, rebellion, liquid, hangover, Seagram's |
| 78 | sour(s) | 2 | jug, Old Granddad, 7 & 7, cold, alcoholic, warm, headache, Irish, stimulant, beverage, brown, Saturday (night), intoxicated(ion), mix, drunkenness, fool |
| 52 | beer | 1 | never touch it, pleasure, horrible, Old Crow, poison, stupid, pain, Haig & Haig, 7 Crown, O.K., heave, dull nerves, aged, hhhh, nice, barrel, contempt, squelch, history, Stevens, nose, dai, morale, bill, ice, joviality, immoral, thirsty, vile, ish, social, spirits, dry, stimulus, old man, ginger ale, yes, coke, sea, strong, bonded, dirt, dislike, delicious, New Year's, distrust, white, fail, sin, fun, nuts, bum, foul, wrong, bunk, clear, prohibition, burp, powerful, vodka, rye, wild women, happy, binge, enjoyment, sickening, no good, middle class, Corky's, club, color, tavern, burn, drug, still, woolly, cuttysarp, asian |
| 44 | liquor | | |
| 41 | gin | | |
| 39 | bottles | | |
| 32 | bad | | |
| 16 | alcohol, good | | |
| 15 | rye | | |
| 11 | glass, women | | |
| 10 | wine | | |
| 9 | rum, drinking | | |
| 8 | bourbon, evil | | |
| 7 | bar, scotch | | |
| 6 | soda, Four Roses | | |
| 5 | drunkard, sick, brandy | | |

STIMULUS - 75. Child

- | | | | |
|-----|-----------------------------|---|---|
| 159 | baby(ies) | 4 | youth, father, grown-up, bear(ing), happy, psychology |
| 117 | mother | 3 | crying, doll, brat, labor, bad, dog, sister, sleep |
| 74 | adult | 2 | born, ball, health, adolescent, learn, grow, nurse, trouble, Christ, clothes, friend, crib, diapers, home, fun, pregnant(cy) |
| 69 | boy | 1 | sex, childish, family, mischief, youngster, sad, happiness, Sonia, nursery, well, lad, pediatrics, feed, human, breast, pain, future, playful, bottle, person, joy, soft, mess, too, monster, Galen, scrawny, scold, you, pretty, nephew, 6, development, twin, service, sleepy, pest, went, snowball, spoiled, room, creep, hand, bed, white, disobedience, Charles, cold, pleasing, have one, prodige, two, Dave, Dick, simple, yes, grass, playing, try, John, sweet, laugh, bright, see, Stephen, kind, pleasant, smile, walk, tyke |
| 62 | small | | |
| 39 | young | | |
| 33 | kid(s) | | |
| 30 | little | | |
| 28 | man | | |
| 21 | parent(s), infant | | |
| 20 | play(s), girls | | |
| 19 | children | | |
| 18 | woman | | |
| 14 | good | | |
| 12 | love | | |
| 10 | cute, love | | |
| 9 | welfare | | |
| 8 | school | | |
| 7 | birth, cry | | |
| 6 | sweet, toy(s), son, brother | | |
| 5 | tot, niece, niece, innocent | | |

STIMULUS - 76. Bitter

652	sweet	3	grapefruit, food, fruit, vinegar, hate, anger
125	sour	2	drink, strong, icky, angostura, unhappy, quinine, tongue, not good
43	taste		
15	chocolate	1	against, tough, anacasta, resent, mild, rid, tea, berries, base, grimace, story, drug, happy, worse, bitters, disappointment, agony, argument, tears, mallow, acrid, drier, red, eat, stem, resentment, weed, tasting, fat, olive, hot, distasteful, coffee, harsh, beer, whiskey, me, salt, pickle, netch, dandelion, truth, dose, poison, cranberries, chills, saccharin, apple, shame, butter, Truman, unpleasant, flower, awful, horse radish, medicine, oranges, sharp, terrible, ish, misery
13	rise		
2	cold, lemon		
8	angry, bad		
6	hard, mad		
5	acid, almonds, herbs		
4	grape		

STIMULUS - 77. Hammer

537	nail(s)	4	thong, Russia, iron, wood
63	saw	3	chisel, pliers
57	hit	2	heavy, arm, forge, handle, loud, task, axe, build, claw, ouch, building
52	pound		
50	head	1	hawk, Don, metal, beat, sound, Mike, axle, throw, shovel, dough, packing, steel, knock, tackle, home, break, finger, boy, sock, bench, sledge, pain, thread, barb, prong, strike, friend, blunt, implement, house, strong, sword, repair, struck, cycle, toe, blow, housework, whistle, can, father, melt, board
38	tongs		
27	tool(s)		
21	hard		
14	sickle		
11	anvil		
8	hurt		
6	carpenter, work, noise		
5	thumb		

STIMULUS - 78. Thirsty

348	water	4	desert
296	drink	3	milk, coke
121	dry	2	drunk, cup, boy, satiated, parched, thirst, eat
99	hungry	1	hunger, drank, stimulus, satisfied, full, no, uncomfortable, bar, rats, gin, drawn, fast, wish, craving, liquid, sweet, just whistle, food, avid, cool, rasp, shy, wake, nail, eat, sugar, filled, soda, mouth, crave, drought, Squirt, content, summer, salt, tasty, liquor, warm, throat, man, horse, well, glue
16	beer		
9	cold		
8	whiskey, wet		
7	H ₂ O		
6	tired, hot, glass		
5	pop, quench		

STIMULUS - 79. City

353	team	5	black, Chicago, dirty
121	Minneapolis	4	hall, busy, traffic
74	state	3	dump, round, water, dirt, home
69	country	2	smoke, streetcar, place, here, live, car(s),
64	square		parks, man, towers, day
32	people, street	1	pipe, snow, crowds, wells, high, excitement,
24	St. Paul		factory, cop, pig, club, fun, Rochester,
22	building(s)		Montevideo, Milwaukee, ocean, Memphis, rural,
20	block(s)		Des Moines, life, gas, hard, huge, population,
15	big		metropolis, Excelsior, court, downtown, RR,
12	New York		Duluth, bustle, Faribault, dust, site, vast,
11	house(s)		triangle, window, county, skyscrapers, Seattle,
10	large		suburb, Preston, dark, map, plant, stand, sin,
09	light(s)		concrete, school, Ames, sidewalk, New Orleans,
8	noise		urban, subway
7	village, farm		

STIMULUS - 80. Square

372	round	4	figure, foot, math, village, table, butter,
211	circle		mile, wood, person
65	block	3	carpenter, lumber, sharp, house, Madison,
26	dance		meat, angles, small, London
22	root	2	buildings, statue, dumb, solid, trees, shape,
20	city		diamond, dice, street, tool, green, city square,
19	triangle		ring, Washington, hard, deal, peg, Boston
17	head	1	market, psychology, policemen, circular, dot,
13	box		geometric figure, centimeter, dark, shops, frame,
12	cube, rectangle		writing, courthouse, dope, lines, easy, formula,
11	time(s)		four, John, bop, hillbilly, floor, tie, inch,
7	town, geometry		sum, rhombus, rule, hep, ta, pack, mouse, tee,
5	corner, chocolate,		hole, knot, board, church, same, bill, 7 corners,
	park, oblong		man, N. Y., fudge, three, grass, not round,
			public, hexagon, France, bond, even, ruler, yard,
			country, right, sides, shirt, nut, garden, St.
			Paul, jerk, πr^2 , right angles, shoulders, red,
			Cadillac, flowers, fence, candy, love, plaza,
			pencil, yard, Times Square.

STIMULUS - 81. Butter

637	bread	5	scotch, grease, salt, toast, cup
81	yellow	4	good, nut
30	soft	3	taste, ball, rum, sweet, square, lard, melt,
24	fat		smooth, expensive, pat
22	food	2	margarine, salty
20	knife	1	up, oil, dish, bristle, loaf, oar, brain, man,
16	eggs		carton, smear, printing, jam, creamery, sweet,
14	cream		brown nose, carrots, red, pound, potato, finger,
13	milk		popcorn, tub, drink, broad, butter, sugar,
9	cow, oleo,		sandwich, doctor, health, lawyer, churn, bum,
	cheese		butter, lemon, bitter, greasy, meat, bull
7	fly		
6	spread, eat		

STIMULUS - 82. Doctor

238	nurse	4	dad(dy), pill(s), surgeon, school, healing, aid
146	stick	3	hurt, bill, kind
133	lawyer	2	study, death, life, friend, boy, healer,
50	medicine		Berens, Lund, call, well, work, operation, pain,
45	health		medical school, fix, bed
38	sickness	1	kit, till, rich man, clinic, mom, clean, me,
24	hospital		ether, child, Ph.D., people, health center,
23	man(e)		Gass, gentle, visit, man-white coat, healthy,
22	dentist		mand, college, harr, Jordan, knowledge, grey,
20	help(s), ill(s)		Baker, explore, them, needle, wound, law, medic,
17	illness		Richardson, saw bones, ambition, getting well,
15	white		aunt, teacher, door, I, cuts, look, woman, fee,
11	patient, physician,		cost, father, baby, home, husband, house,
	heal		metabolism, old, Kildare, hat, throat, church,
8	good, bag,		scalpel, gilder, grief, mother, coat, chief,
	M.D., office		wall, feel, cold, ouch, no, medical, white robe,
7	stethoscope		stitch, Livingstone, rest, said, Morsey
6	cure		

STIMULUS - 83. Loud

541	soft	3	music, long, crash, blast
210	noise	2	horn, deafening, clear, harsh, gun, speaker,
68	quiet		strong, low, voice, cry, drum, thunder, hurt,
27	noisy		yell
19	sound	1	kids, tie, heard, machinery, report, clap, salt,
15	mouth(ed)		radio, band, bell, whistle, coarse, train, math,
9	bang		short, bag, shot, fair, bear, boob, talking, me,
6	silent		din, ear, bothersome, talk, faint, nuisance,
5	sharp, shout		hard, base, boone, fight, racket, deafen, child,
			scream, heavy, fear, decibel, big, cheerleading,
			crazy, boisterous, shrill, door, louder, woman,
			still, recoil, song, call, Phyllis, hammering,
			annoying, horrid, thief, clang, disturbance,
			no, sax, waves, car

STIMULUS - 84. Thief

286	steal	6	dark, jewels, take
138	robber	5	movie, villain, robbery
69	crook	4	thrift, bandit, sneak, crime,
54	burglar	3	stealing, bicycle, honest, stop, murderer
37	money	2	accomplice, Dillinger, mask, wrong, merchant,
25	cop		stealer, rat, Bagdad, good, sly, silver(ware),
23	bad, stole		vandal, person, poor, bag, catch, window, jewelry
21	rob	1	spoils, beggar(man), stealth, Indian, loot, judge,
19	stolen		voleur, lawyer, danger, fast, break, purse,
14	police, run, man,		red, clever, brother, help, Damascus, loot,
	night, jail		guilt, in the night, noise, angel, loss, victim,
13	beggar,		woman, gold, roar, goods, policeman, flee, city,
	criminal		chickens, in, diamond, giver, alarm, River Falls,
12	gun		stolen goods, lose, gamble, chase, suit, property,
8	law		no dialogue, sorrow, unlawful, gam, London, bum,
7	river,		pocket, doctor, chair, dog, evil, culprit,
			fiend, block, jerk, wit, don't, bank, sole,
			prison, took, fail, pocketbook

STIMULUS - 84. Thief (continued)

- 1 petty, chief, prison, crafty, arrest, fire, harm, clothes, house, show, bedroom, murder, flight, the, stole, leaf, coward, boy, dishonest

STIMULUS - 85. Lion

- | | | | |
|-----|--------------------------------------|---|---|
| 261 | tiger | 5 | eat, man, hunt, fur, beast |
| 148 | animal | 4 | MM, mouth, yellow, ferocious, jaw, Androcles, hair |
| 69 | roar | | |
| 31 | cat | 3 | horse, paw, kill, Richard, movies, leopard |
| 30 | cub | 2 | share, sea, dangerous, kitten, hear, cruel, tail, mountain, loud, street, furious, claws, England, lady, strength |
| 28 | den | | |
| 27 | zoo, jungle | 1 | wolf, pen, down, monkey, zebra, brave, terrible, wild, noise, agile, gold, hunger, ate, meat, tender, creep, brown, joy, fox, chase, house, run, lair, rock, ZAE, story, Fagan, of, bad, cut, tree, chain, shield, growling, pretty, heart, cries, rabbit, Sampson, shepherd, huge, devour, Greek, is busy, Britain, eating, tawny, stalk, point, woods, hungry, powerful, Goliath, scared, mad, girl, angry, desert, show, throne, fight, giraffe, trainer |
| 19 | cage, tamer | | |
| 16 | mouse | | |
| 15 | lamb, bear | | |
| 12 | hearted | | |
| 11 | mane | | |
| 9 | Africa, Leo, dog | | |
| 8 | growl, fear, head, strong | | |
| 7 | lioness, circus, hunter, teeth, king | | |
| 6 | fierce, Daniel, big | | |

STIMULUS - 86. Joy

- | | | | |
|-----|-------------------------|---|--|
| 209 | happy | 4 | delight, health, to, tears, peace |
| 202 | sorrow | 3 | relief, mirth, gay, bliss |
| 135 | happiness | 2 | dog, help, shout, despair, wonderful, dishes, bells, cry, excitement, exuberance, wash, child(ren), gaiety, pleasure, enjoy |
| 33 | grief, sad, sadness | | |
| 25 | Christmas | 1 | now, restraint, like, school, canon, bad, hardship, fright, money, gal, emotion, depression, woman, Arnold, Buggsy, vacation, thrill, made, alacrity, fight, sour, bed, cheer, bright, party, jump, great, Noel, radiance, glee, hat, know, none, washing, rejoice, birth, dance, behold, sister, night, navy, pride, music, man, hymn, perfume, eating, holiday, packard, Joyce, benefit, freedom, leap, home, New Year's, Roger, sweet, Mary, divine, heaven, dream, Christ, rage, whopee, swell, unhappy, reminisce, light, room, Marlys, pain, rapture, ride, nice, hurt, Schiller, mourn, bread, Proctor & Gamble, nature, crying, bless, tullock |
| 23 | glad | | |
| 21 | soap | | |
| 14 | love | | |
| 13 | world, fun | | |
| 12 | girl | | |
| 11 | hate | | |
| 10 | gladness | | |
| 9 | anger, good, smile | | |
| 6 | laugh | | |
| 7 | elation, hope, laughter | | |
| 6 | boy | | |
| 5 | fear | | |

STIMULUS - 87. Bed

584	sleep	4	time, post, stead, bug(s), spread, ridden
73	soft	3	springs, house, cot, lamp, heavy, woman(e), quilt, white
36	sheet		
29	pillow	2	made, big, furniture, blue, dream, dresser, clothes, make, home, sick, sex, good, go, lie, light, hard
25	rest		
18	covers		
16	night, blankets, room	1	salt, lay, twin, pink, gown, flag, slept, in, bath, floor, you, read, black, happiness, head, window, jacket, river, comfortable, passion
9	comfort		
8	mattress, girl(s), tired, chair, table		parlor, linen, yes, hug, fuck, son, pleasure, down, rice, honeymoon, warmth, lead, hot, asleep, large, enjoyment, led, fornication
6	wet, board		
5	warm, wetting, sleepy		

STIMULUS - 88. Heavy

583	light	3	dark, foot, girl, hang(s), bag, slow, hearted
65	load	2	sack, trunk, eyelids, boot, object, sins, snow, ton, hand, smoke, brick(s), box(es), difficult, loud
47	hard		
35	weight	2	truck, rule, sunlight, obese, liquor, bad, casting, blanket, strength, rock, push, logs, sleep, gravy, odor, lid, lug, cumbersome, ponderous, ugh, bread, Bob Slater, awkward, square, sharp, wood, ache, mass, plump, night, drink, cloth, small, on, cloud, hurt, wrestler, dense, tog, mg, fatigue, ship, footsteps, long, clothes, breath, round, set, cow, cardboard, backache, air, shotgun, gut, drop, stout, strain, thick, package, start, low, shoes, effort, cement, piano, carrying, chair, deep, elephant, sugar, back, expressive, pan, lot, food, thug, drinker, eater, sound
19	lead		
17	soft		
12	big		
10	lift, work		
9	sleep, fat, iron		
7	tired, burden		
6	coat, man, large, looks		
5	stone		
4	carry, water		

STIMULUS - 89. Tobacco

515	smoke	3	taste, cough, match, spit, pouch, stink(y), good
191	cigarette	2	weed, odor, Camels, no, enjoyment, user
49	pipe	1	puff, add, habit, terrible, spittoon, fun, ughh, patch, on the wagon, can, Kools, south, field, noise, man, no good, bitter, distasteful, Chesterfield, food, ish, nuts, stimulus, aoid, growers, white, boubon, Copenhagen, quit, satisfying, chromosome, breath, money, wheeze, land, small, paper, Lucky Strike, heavy, whiskey
31	cigar		
27	road		
23	juice		
20	chew		
18	smoking		
14	smell		
11	leaf(ves)		
8	nicotine		
6	bad		
5	brown, stain		
4	plant, Luckies		

STIMULUS - 90. Baby

162	boy	5	food, kid, tiny
142	child	4	noise, woman(s), cuddle(y), dog, birth
113	cry	3	buggy, parents, milk, laugh, helpless, smile, man, carriage, wet
7	mother	2	joy, ball, six, human, bunting, sister, son, sit, playpen, care, happy
51	girl	1	whimper, rocker, big, shoes, clean, coy, tot, fun, marriage, hands, doctor, softness, dress, small child, delicate, thumb, high chair, new, clothes, learn, ugly, dependence, pregnancy, bedroom, daughter, nephew, hospital, twins, caps, yell, Jerry, cried, rattles, cow, stupid, baboon, no, Boone, nice, fondness, pair, snooks, smooth, spill, wear, neonate, Carol, maybe, fat, nursemaid, Nancy, lotion, on the way, pleasant, innocent, face, bath, pretty, growup, talk
43	small		
27	infant		
21	cute		
18	little		
17	blue		
12	diapers		
13	crib, crying		
11	bed, sitter, soft		
10	born, bottle, brother		
9	toy(s), doll, pink, sleep		
8	sweet, blanket, young, adult, spoon		
7	rattle		
6	love, see		

STIMULUS - 91. Moon

205	stars	6	rocket, romance, full, high
168	sun	5	dark, satellite, man(s), crescent, big, face
87	night	4	maid, pretty, rise, beautiful, cold, silver
64	light		
50	shine(s)	3	Mars, noon, universe
43	sky	2	half, soft, nice, goon, water, heaven, shape, distance, lake, lunatic, Over Miami, Saturn, astronomy, water
33	earth		
26	yellow	1	cool, tune, date, gold, stroke, tide, face
18	beam(s), bright, June		night, swoon, pole, circle, study, look, clouds, body, telescope, pale, 12, away, beauty, down, Buck Rogers, flight, clear, eat, kiss, exciting, parking, morning, solunar, loon, smooch, car, green cheese, girl, science, summer, luna, fly travel, moon, saucer, space, sixpence, dream, reflection, high, new, large, God, necking, glass, honey, environment, green, far, trip, fascinating, evening, niad, solar system, box
17	round		
15	blue		
13	white		
12	glow, love		
10	planet		
9	spoon		
8	cheese		

STIMULUS - 92. Scissors

671	cut	8	material, sewing, sew
90	sharp	3	clip
43	paper	2	razor
38	cloth	1	hair, pliers, saw, clippers, grip, hold, metal, forceps, machine, clothes, fabric, barber, pair, grinders, pointed, table, nostril, mother, fork, tongs, string, rabbi, black, wrestling, shear, spool, wrestle, instrument, cross, pins, hard, game, nails, silver, iron, strip
33	knife(s)		
15	shears		
13	thread, cutting		
9	snip, needle		

STIMULUS - 93. Quiet

348	loud	4	zone, shhh, please
113	noisy	3	sleepy,
98	noise	2	mouse, home, serene, solitude, cool, front,
63	soft		girl, time, soundless, church, light, noiseless
53	sleep	1	Dr., sun, sea, think, stop, class, house,
38	man		rustle, gentle, thinking, down, nursery, loud-
34	still		ness, rock, step softly, summer, lost, lake,
27	hospital		scream, mice, psychology, relaxation, person,
26	peace		boy, impact, small, now, sleeping, multitude,
23	night		golden, fast, sweet, jump, yet, ish, easy,
10	library, silent, peaceful		softly, fear, moody, evening, day, bed, test,
8	room, rest, sound		alone, warm, country, hear, classroom, sign,
7	dark		dignified, spring, ocean, candle, stillness,
6	silence, nice, calm		awake, something, radio, be, restless, eyes,
5	study		hours

STIMULUS - 94. Green

262	grass	1	chint, giant, valley, purple, brown, dark, Ireland
216	red	3	envy, emerald(s), peas, cloth, salad, forest, orange, cool, pepper
122	blue	2	lake, sick, shoe(s), dress, sleeve(s), gold, ground, lawn, sweater, felt, field, cabbage, pastures, ocean
66	yellow	1	meadow, sky, book, robe, chartreuse, restful, pink, coat, earth, bright, plush, spinach, peace, soft, kelly, suit, quiet, red-yellow, wear, jelly, green, signal, lettuce, stuff, lynne, death, milk, chair, land, bag, golf, hay, stoplight, comfort, vegetable, man, beans; flower, read, tea, wave, traffic, spring, hair, clay, house, snake, food, moss, cheese, money, fado, A.F.L. river, fresh, shimmer, habits, jealousy
53	color		
23	go		
21	light		
20	white		
16	sea		
14	black		
12	tree(s)		
10	plant(s)		
6	grey, eyes, water		
5	Irish, leaf(ves)		

STIMULUS - 95. Salt

430	pepper	7	NaCl
83	sugar	6	white
76	water	5	table, spice
50	taste	4	flavor, free, earth, good, lick
33	sea	3	season, mines, bread, salty, grains, thirsty, popcorn, celery, savour
31	bitter	2	french fries, flat(s), tomato(es), soup, dry, Morton's, cellar, butter
30	shaker	1	crackers, port, chemistry, sodium, base, apple, compound, sting, body, grimace, cow, halite, blue, flour, iddine, desert, diet, sprinkle, lemons, fish, black, pour, carrots, eggs, cuts, tart, drink, sorethroat, coffee, song, potato, spray, baby, pork, sharp, mineral, water taffy, tasty, iodized, eating, stronge, use, cheese
29	food		
23	ocean		
19	sweet, lake		
15	eat		
12	meat		
11	Peter		
9	sour, seasoning		

STIMULUS - 96. Street

190	Avenue	5	traffic, live
128	road	4	curb, main, straight, home(s), dirt
112	cars	3	ruel, 4th, walker, 6th, path, noise, dance, Washington
51	light(s)	2	taxi, clothes, winding, crossing, sour, way, Basin, fight, gutter, dreams, St. Clair, people, 5th, University, black, wide, highway, trees, icy
46	city	1	land, fountain, direction, stores, walking, snow, Raymond, 15th, Minnesota, wet, Logan, country, 312 W. Walnut, shade, railroad, ruts, Morgan, Cleveland, block, Onowen, oil, in. Melbourne, dirty, Walnut, paved, beach, Blair, post, slush, corridor, puddle, units, Ashland, 14th, Queen Ave., Larue, Lyndale, King, Plymouth, Church, village, concrete, Nicollet, wall, #, Halifax, 3rd, asphalt, line, repair, major, cement, automobiles, side, pole, name, nob, go, ice, boulevard, lamppost, call, clean, cobblestone, Hennepin, First, meet, white, ton, beat, song, Osceola, brick, streetcar, crowded, across, green, Emerson, Holly, Lawson, square, New York, Knox, destination, Burr, coordinate, Columbia, down, picture, sitter, Payne Ave.
38	alley		
33	walk		
30	sign		
24	house(s)		
20	corner, sidewalk		
16	town		
14	number		
13	scene		
9	drive, name, lamp(s)		
8	pavement, lane, long		
7	cleaner, narrow		
6	cross, address, dark		

STIMULUS - 97. King

751	queen	4	royal, Henry (IV)(VIII), power, Edward, county, Solomon, monarch
20	England	3	kingdom, prince, leader, Siam, John
18	crown	2	top, Jack, reign, Farouk, Cole, story, lion, royalty, James, I
13	pin	1	court, purple, robe, sceptre, duke, fish, Lear, knight, peasant, empire, Midas, king, lard, crab, blue, ace, no-good, hearts, head, Julius, Anthony, Anna, Louis, cotton, large, rex, lord, Louis XIV, street, Leo, checkers, rich, friend, ring, chief, jewels, feudal, emperor, clubs, land, Arabia, shit, sovereign, cheese, size, highway, dead, dog, men, regal, Arthur, money, gout, kingly, despotism, mountain king, Herod, pomp, coil, serve, checkmate, feast, high, president, gold
11	George		
10	ruler,		
9	Kong, throne, man		
6	cards, Tut		
5	rule, subjects, chess		

STIMULUS - 98. Cheese

108	crackers	24	holes	6	roquefort, beer, sour, cut, good
94	mouse(ice)	23	sandwich	5	pie, kraft, dairy, spread, limburger
82	bread	21	smell	4	orange, smile
70	eat	20	rat	3	burger, tasty, taste, macaroni, big
68	food	19	moon	2	Holland, cave, cutter, velveeta, apple pie, factory, tangy, ish, better, soft, Friday, picture, dry, adam
47	yellow, milk	18	green		
42	cake	15	swiss, wise		
37	butter	11	cream		
32	cottage	8	American		
25	blue	7	cow, bacon, cheddar		

STIMULUS - 98. Cheese (continued)

- 1 rye, salad, corn, mite, brick, porus, eating, sweet, sausage, knife, mold, and, icebox, no, apple, wavy, pumpernickle bread, strong, cloth, Switzerland, beans, wedge, photography, carton, toast, mild, meat, longhorn, rotten, wrapper, Christmas, camembert, swirl, dislike, king, stinky, home, please, shore, curd, curd, parmesan, cat, slices, sharp, read, white, roll, popcorn, waffles, age, salt

STIMULUS - 99. Blossom

- | | | | |
|-----|------------------------|---|--|
| 572 | flower | 5 | sweet, seeley, orange |
| 78 | apple | 4 | out, cherry |
| 35 | bloom | 3 | red, beauty, stem |
| 28 | time | 2 | fruit, leaf, bird, bough, blue, breast, apple blossom, apple tree |
| 20 | spring | 1 | fool, clover, day, blood, Negroes, nice, girl, fragrance, fragrant, root, man, bean, top, skunk, spread, gal, lily, bush, magnolia, wilt, flower, carnation, forth, wedding, name, field, child, beautiful, petals, petunia, cow, sun, white, yellow |
| 19 | smell | | |
| 18 | rose | | |
| 13 | bud | | |
| 11 | plant, tree(s), pretty | | |
| 9 | pink | | |

STIMULUS - 100. Afraid

- | | | | |
|-----|--|---|--|
| 261 | fear | 4 | bold, fearful, child, hurt |
| 240 | scared | 3 | snakes, dog, not afraid, confident, anger, horror, accident, worried |
| 98 | dark | 2 | sick, scream, finals, courageous, shy, spider(s), animal, secure, trouble, army, tense, death, worry, darkness, shrink, terrified, content, mad |
| 63 | brave | 1 | sun, reaction, gun, stop, nah, people, shake, winder, alone, hot, anxious, sissy, pest, mean, quiver, silly, running, drop, crying, tremble, of what, scar, eager, lonely, smear, shirk, unknown, of, kind, awake, cold, tiger, defiant, flunk-out, despair, you, conflicts, sweat, sure, hatred, physics, can't, west, tests, frightened, lion, unhappy, men, fire, sleep, certain, heart, crouch, hate, eyes, tired, soldier, sound, trust, laugh, light, Negroes, yes, loud, strong, bomb, timid, wolf, queer, nice, girl, hide, help, carry, to dream, calm, unhappiness, bell, unprepared, cringe, jungle, cats, something, glad, high, troubled, enemy, why, senses, murder, ghost, shaky, sad, bark, uneasy, morrow, friendly, anxiety, nervous, passive, mystery, recall, yellow, carry, alarm |
| 12 | frightened | | |
| 12 | run, scare | | |
| 11 | happy | | |
| 10 | unafraid | | |
| 9 | courage | | |
| 8 | no, fearless | | |
| 7 | fright, terror, never | | |
| 6 | fight, coward, danger, not, cry, sight | | |
| 5 | quiet, war, bad | | |

A P P E N D I X A

The Kent-Rosanoff Word Association Test

Name _____ Class _____ Date _____

No.	Stimulus	Response	No.	Stimulus	Response
1.	Table	_____	26.	Wish	_____
2.	Dark	_____	27.	River	_____
3.	Music	_____	28.	White	_____
4.	Sickness	_____	29.	Beautiful	_____
5.	Man	_____	30.	Window	_____
6.	Deep	_____	31.	Rough	_____
7.	Soft	_____	32.	Citizen	_____
8.	Eating	_____	33.	Foot	_____
9.	Mountain	_____	34.	Spider	_____
10.	House	_____	35.	Needle	_____
11.	Black	_____	36.	Red	_____
12.	Mutton	_____	37.	Sleep	_____
13.	Comfort	_____	38.	Anger	_____
14.	Hard	_____	39.	Carpet	_____
15.	Short	_____	40.	Girl	_____
16.	Fruit	_____	41.	High	_____
17.	Butterfly	_____	42.	Working	_____
18.	Smooth	_____	43.	Sour	_____
19.	Command	_____	44.	Earth	_____
20.	Chair	_____	45.	Trouble	_____
21.	Sweet	_____	46.	Soldier	_____
22.	Whistle	_____	47.	Cabbage	_____
23.	Woman	_____	48.	Hard	_____
24.	Cold	_____	49.	Eagle	_____
25.	Slow	_____	50.	Stomach	_____

Name _____

<u>No.</u>	<u>Stimulus</u>	<u>Response</u>	<u>No.</u>	<u>Stimulus</u>	<u>Response</u>
51.	Stom	_____	76.	Bitter	_____
52.	Lamp	_____	77.	Hammer	_____
53.	Dream	_____	78.	Thirsty	_____
54.	Yellow	_____	79.	City	_____
55.	Bread	_____	80.	Square	_____
56.	Justice	_____	81.	Butter	_____
57.	Boy	_____	82.	Doctor	_____
58.	Light	_____	83.	Loud	_____
59.	Health	_____	84.	Thief	_____
60.	Bible	_____	85.	Lion	_____
61.	Memory	_____	86.	Joy	_____
62.	Sheep	_____	87.	Bad	_____
63.	Bath	_____	88.	Heavy	_____
64.	Cottage	_____	89.	Tobacco	_____
65.	Swift	_____	90.	Baby	_____
66.	Blue	_____	91.	Moon	_____
67.	Hungry	_____	92.	Scissors	_____
68.	Priest	_____	93.	Quiet	_____
69.	Ocean	_____	94.	Green	_____
70.	Head	_____	95.	Salt	_____
71.	Stove	_____	96.	Street	_____
72.	Long	_____	97.	King	_____
73.	Religion	_____	98.	Cheese	_____
74.	Whiskey	_____	99.	Blossom	_____
75.	Child	_____	100.	Afraid	_____

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.